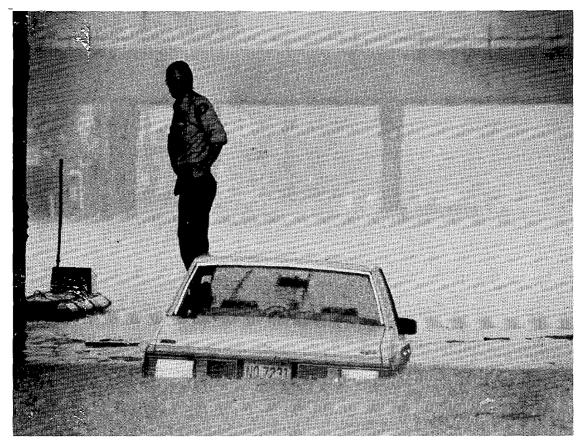
# STORM DATA





"I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION AND IS COMPILED FROM INFORMATION RECEIVED AT THE NATIONAL CLIMATIC DATA CENTER, ASHEVILLE NORTH CAROLINA

Kennel D Waden

NATIONAL CLIMATIC DATA CENTER

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#### CONTENTS

Cover: An officer is pinned atop his car in a flooded underpass in Milwaukee, Wisconsin as rains in excess of 7 inches fell in a short period on the afternoon of August 6th. The rains broke all previous records for storm durations of 5 minutes to 24 hours (see HEAVY RAINS and FLOODING at MILWAUKEE, WISCONSIN, page 9). ---Photo by Benny Sieu, The Milwaukee Sentinel; provided by the NWSFO at Milwaukee, Wisconsin.

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# STORM DATA (ISSN 0039-1972)

The section on Outstanding Storms of the Month is prepared by Professor T. Theodore Fujita, editor, and Duane J. Stiegler, associate editor, the University of Chicago with funding by the U. S. Office of Naval Research. The Storm Data and Unusual Weather Phenomena narratives, and summaries of Hurricanes/Tropical Storms are prepared by the National Weather Service. The National Climatic Data Center compiles statistics on deaths, injuries, damage, and prepares the annual summaries of Tornadoes and Lightning. This publication contains our best information on storms, but, due to the difficulties inherent in collection of this type of data, it is not all-inclusive. Late reports and corrections will be carried quarterly. Maps of zones used in the Storm Data and Unusual Weather Phenomena will be published in these editions; Eastern States: JAN, APR, JUL, OCT.

Central States: FEB, MAY, AUG, NOV. Western States: MAR, JUN, SEP, DEC.

Storm Data is published monthly by the National Climatic Data Center.

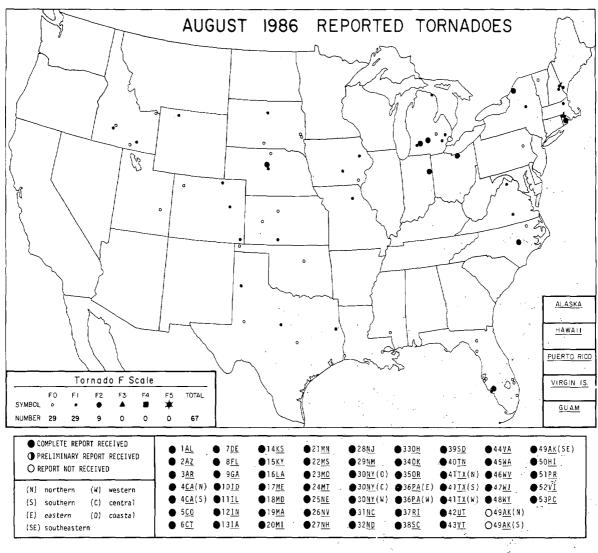
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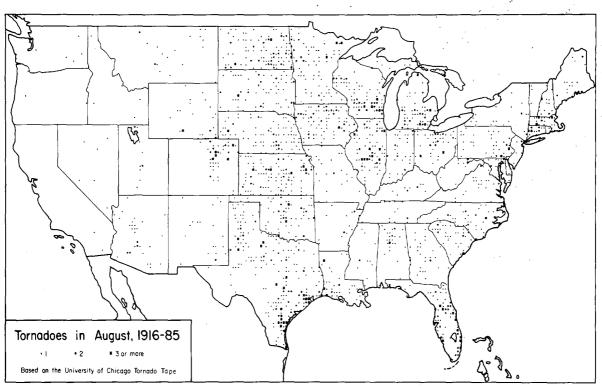
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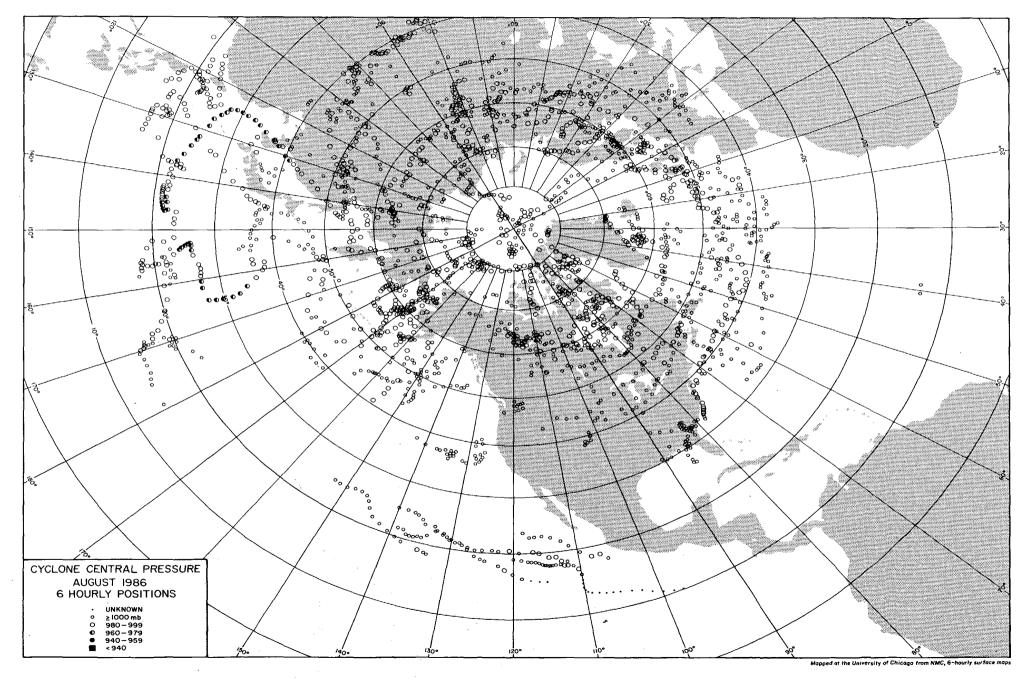
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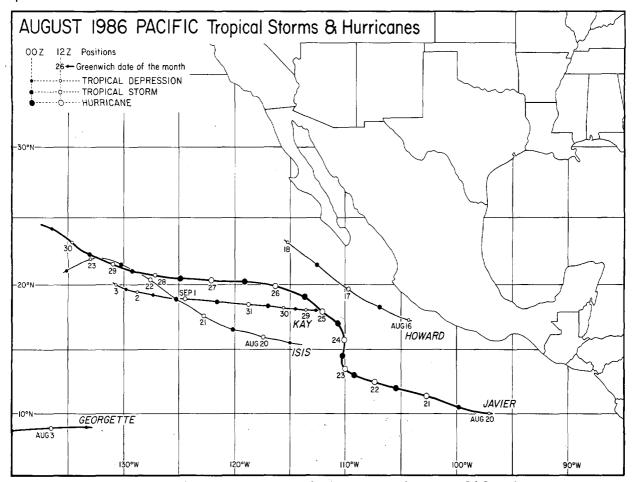
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## OUTSTANDING STORMS OF THE MONTH

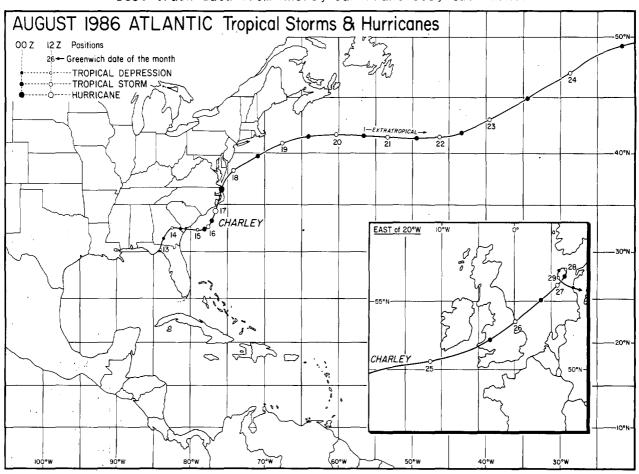






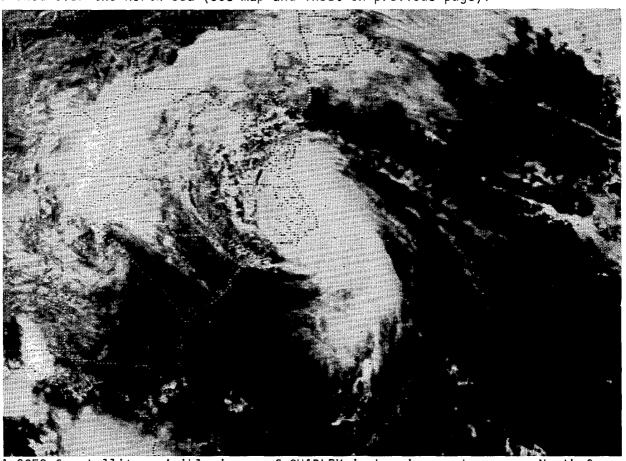


---Best track data from NWSFO, San Francisco, California.

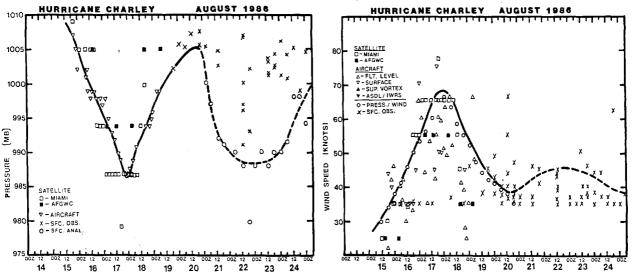


---Best track data from the National Hurricane Center, Miami, Florida.

Hurricane CHARLEY, the third Atlantic storm of tropical origin in 1986, became the second hurricane to make landfall in the continental U.S. this season as it traversed North Carolina's Outer Banks region on August 17th and 18th. Although CHARLEY just barely reached hurricane strength, it affected a large portion of the eastern seaboard with strong winds and high tides as it moved north-northeast along the coast. Having moved well off the coast, CHARLEY became extratropical on August 21st, but remained significant by producing strong winds over a large area while moving east-northeast through the North Atlantic shipping lanes all the way to England. The storm later weakened over the North Sea (see map and inset on previous page).



A GOES 6 satellite, visible image of CHARLEY in hurricane stage over North Carolina's Outer Banks at 1630GMT (1130EST) on August 17th. ---Photo provided by NHC.



Plots of Hurricane CHARLEY's minimum sea level pressure (left) and maximum sustained surface winds (right) versus time (GMT). ---Figures from NHC.

LOCATION	STRONGEST DATE/TIME		MPH) PEAK	MIN PRESS, DATE/TIME		ALL (1N.) 24 HR	STORM TOTAL
North Carolina Wilmington	17/1904Z	_	29	17/0905Z	17	0.39	0.48
Jacksonville	17/16562	21	29	29.65 17/1056Z	17	0.77	0.85
				29.62			
New Bern	17/1450Z	17	25	17/1450Z 29.61	18	1.45	1.71
Cherry Point	17/1230Z	30	39	17/1355Z 29.49	18	0.87	1.60
Cape Lookout	17/1100Z	47	58	-	-	-	-
Atlantic Beach	17/11302	35	58	-	-	-	-
Buxton	17/1630Z	49	65	17/1605Z 29.51	17	2.73	?
Frisco Camp	17/1725Z	55	80	17/17002	-	-	-
Dare Co. Swanquarter	17/1930Z	58	78	29.51 17/1850Z	-	-	
Duck Coe Pier	17/20002	56	77	29.31	-	-	-
Virginia							
Norfolk Airpt.	18/0050Z	40	63	18/0100Z	18	1.08	?
S. Chesapeake Bay Bridge	17/2300Z	97	7/2224Z 104	29.50	-	•	-
Cape Henry	17/2300Z	54	82	-	_	-	-
Coal Piers West Norfolk	17/2300Z	-	81				
Maryland							
Baltimore	17/1858Z	-	28	18/09302	18	0.29	0.29
Salisbury	18/0700Z	_	48	29.79 18/1000Z	18	1.70	1.70
Ocean City	18/1030Z	50	78	29.54	17/18	-	2.70
Assateaque	18/1000Z	-	73	=		-	_
Seashore	18/10002	•	73	-	17/18	•	3.25
Delaware							
Wilmington	18/1157Z	21	29 ·	18/1000Z	18	-	0.02
Rehoboth Bch.	18/1100Z	52	75	29.72 18/1000Z	<u>.</u>	-	-
Massachusetts				29.54			
Nantucket Is.	19/0530Z	60	_	19/Q530Z	19		3.20
Chatham	19/0313Z	37	48	29.70 19/0600Z	19	2.68	?
New York	,	•		29.53			•
New York City	18	_	35	18/2000Z	18	_	0.36
•		-	-	29.85			
JFK Airport	18	-	35	18/2000Z 29.83	18	-	0.26

Selected meteorological statistics for Hurricane CHARLEY, August 1986.

	INFALL STORM TOTALS		
LOCATION	TOTAL (INCHES)	LOCATION	TOTAL (INCHES)
Patuxent NAS, MD	2.13	Prince Frederick, MG	1.56
Hollywood, MD	4.24	Bryantown, MD	3.57
Churchton, MD	3.85	Mount Victoria, MD	2.75
Snow Hill, MD	2.35	S.W. Baltimore, MD	2.60
Lewes, Del	0.47	Georgetown, Del	
Laguardia Apt, Ni	/ 0.82	lslip, NY	0.52
LOCATION	TIDES (FEET)	LOCATION	TIDES (FEET)
		<del></del>	
S. Pamlico Sound	TIDES (FEET)  2 to 3 abv norm* 5.78 abv MLW	Buxton, NC	<u>TIDES (FEET)</u> 4.63 abv MLW**
Duck Coe Pier, NC	2 to 3 abv norm*	Buxton, NC South Island	4.63 abv MLW**
S. Pamlico Sound Duck Coe Pier, NC Sewells Pt., VA Ocean City, MD	2 to 3 abv norm* 5.78 abv MLW 5.4 abv MLW 4.6 abv MLW	Buxton, NC South Island Chesapeake Bay	4.63 abv MLW**
S. Pamlico Sound Duck Coe Pier, NC Sewells Pt., VA	2 to 3 abv norm* 5.78 abv MLW 5.4 abv MLW 4.6 abv MLW	Buxton, NC South Island Chesapeake Bay Long Island, NY	4.63 abv MLW** 5.4 abv MLW
S. Pamlico Sound Duck Coe Pier, NC Sewells Pt., VA Ocean City, MD Nantucket, MA	2 to 3 abv norm* 5.78 abv MLW 5.4 abv MLW 4.6 abv MLW	Buxton, NC South Island Chesapeake Bay Long Island, NY	4.63 abv MLW** 5.4 abv MLW

Additional rainfall and tide reports associated with Hurricane CHARLEY, August 1986.

DATE/TIME	SHIP	LAT.	LON.	WIND DIR./SPD.	PRESS (mb)
16/1200Z		33.7	76.6	140/35	1009.7
16/1800Z		33.3	74.5	180/36	1013.8
17/0000Z	VCWZ	33.9	76.9	110/35	-
17/12002		33.9	74.1	160/35	1010.8
18/0600Z		37.0	76.1	330/37	1000.0
18/1800Z		40.5	72.0	070/35	1009.0
19/0000Z		38.9	70.2	200/46	1000.8
19/12002		38.2	68.4	250/38	1006.8
·		38.7	66.2	240/44	<del>-</del>
19/18002		39.3	63.8	230/45	1006.0
20/00002		39.3	64.0	260/42	1007.1
"	05ZA	39.9	61.2	210/43	1008.0
"		40.6	60.8	200/38	1005.7
."		43.8	60.1	100/49	1007.8
20/0600Z		43.8	60.1	060/40	1005.7
"		43.8		060/38	1005.0
."		45.3	59.8	070/35	1013.2
20/1200Z		39.8	63.3	320/44	1015.0
"		40.5	63.0	330/38	1010.9
"		42.4	63.1	360/37	1013.5
н		43.8	60.1	040/66	1008.8
"		43.8	60.7	060/40	1009.3
"		44.2	58.4	050/55	1007.2
. "		45.6	57.9	090/37	1014.2
20/18002	ELEA7		54.8	240/35	1005.5
	EL DZ7		52.4	150/38	1009.5
		41.1	60.3	340/38	1008.0
		43.8		030/47	1014.1
		45.6	57.8	060/40	1015.4
*	GCXD	46.0	53.7	080/37	1015.3

Ship reports in the vicinity of CHARLEY during tropical stages. Wind speeds are in knots.

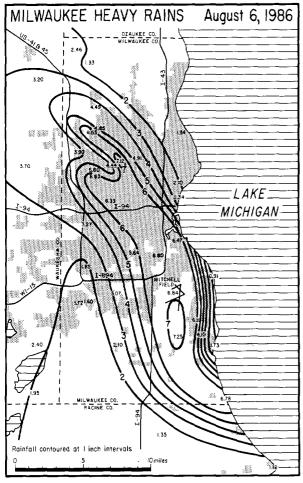
--- All above tables are from the National Hurricane Center, Miami, Florida.

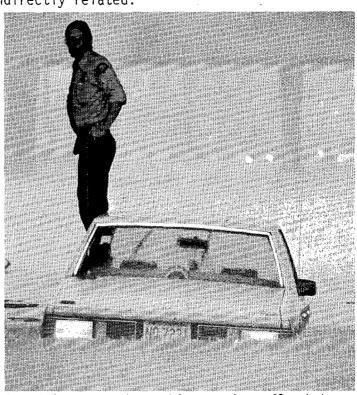
# 2. THUNDERSTORM WINDS at WINNER, SOUTH DAKOTA on August 6, 1986

During the evening of August 6th, thunderstorm winds gusting to near 100 mph tore through the town of Winner in southcentral South Dakota, damaging 200 houses of which 12 received major damage. Downed power poles left the town without power for 5 hours, and the damage extended into neighboring rural areas. RIGHT: A winddamaged barn near Winner. ---Photo by Bob Krumm, The Winner Advocate; supplied through the NWSFO at Sioux Falls, SD.

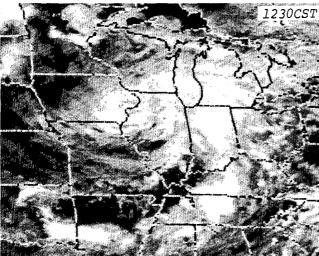


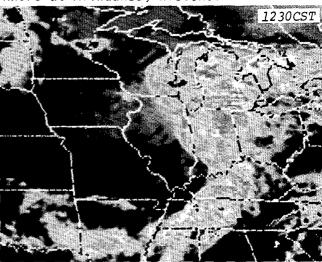
On the afternoon of August 6th, the Milwaukee metropolitan area was struck with torrential rains so heavy that all previous rainfall records for a storm duration of 5 minutes to 24 hours were broken. 5 to 7 inches fell in a short time over much of the area (see map below), causing flash flooding of tremendous proportion. 6.84 inches officially fell at General Mitchell Field, more than 5 of which fell in the first two hours. Floodwaters were 4 feet deep on the field in Milwaukee County Stadium, and filled the basement of the main terminal at the airport. About \$5.9 million in damage occurred throughout the area, \$2 million at the airport alone. The flooding also caused one death; a second death was indirectly related.





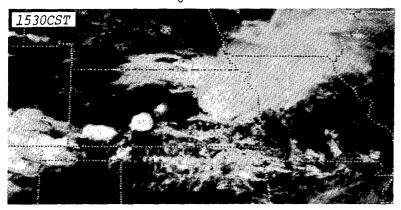
An officer stands on his car in a flooded underpass at S. First Street and Lincoln Ave. in Milwaukee as the heavy rains were in progress. ---Photo by Benny Sieu, The Milwaukee Sentinel. Photo and map (left) provided by the NWSFO at Milwaukee, Wisconsin.

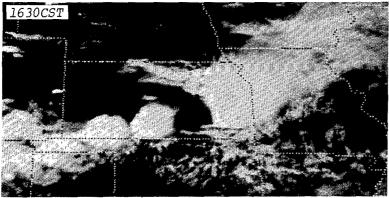


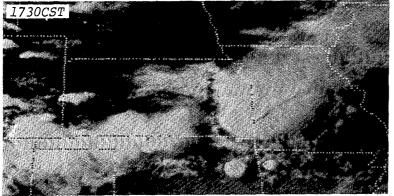


GOES 6 satellite, visible (left) and infrared (right) images of the flood-producing storm which was triggered by a small low pressure system centered on the Illinois-Iowa border over the Quad Cities. ---Photos from NESDIS.

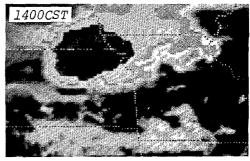
On the afternoon of August 1st, a powerful thunderstorm brought strong, widespread downburst winds to a large portion of eastern Kansas and southwest Missouri as it made an arcing path, first southeast and then east-southeast, from Junction City, Kansas to east of West Plains, Missouri. Wind gusts exceeded 100 mph in some areas, and the storm dropped large hail as well. In terms of total damage and areal extent, the storm was one of the worst to ever hit Kansas, causing an estimated \$71 million in damage in that state alone. The heaviest damage was within Kansas and occurred in a band through Council Grove, Emporia, Burlington, and Iola, to south of Moran. 19 injuries and no deaths occurred.

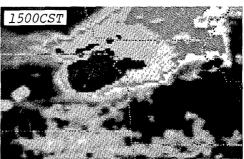


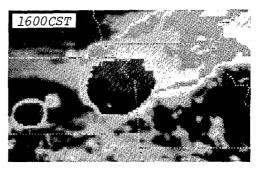


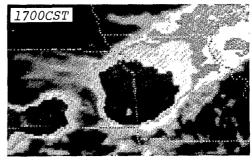


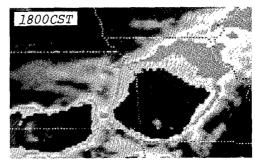
Sequences of GOES 6 satellite visible (above) and infrared (right) images show the storm's development and movement on August 1st. Note that the damaging surface winds moved with the area of coldest cloud top shown in the IR sequence, thereby relating them to the storm's strongest vertical motions. ---All photos from NESDIS.

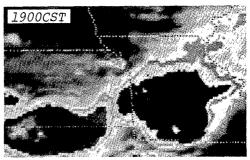










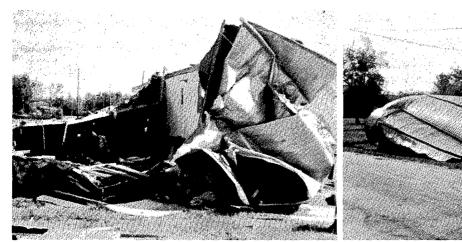




An unroofed home east of Emporia where winds were estimated to have been stronger than 80 mph. ---Photo by Marc Stratton, The Emporia Gazette.



A flattened milo field near Burlington where winds were estimated at around 100 mph. This was typical of the crop damage that occurred through much of Coffey County. ---Photo by Bern Ketchum, The Topeka Capital-Journal.



Mobile home damage (left) and the remains of a grain bin (right) in Burlington.





Destroyed mobile homes in Burlington (top) and southwest of the town (bottom).

---All above photos are courtesy of the Coffey County Today.



A fifth wheel trailer that was rolled over onto a swimming pool in Iola. ---Photo by Thomas Long, The Iola Register.



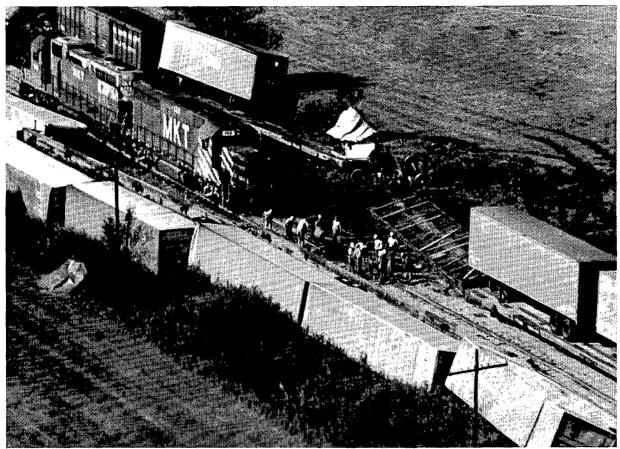
Damage to the football stadium in Iola's Shepherd Park. ---Photo by Bruce Symes, The Iola Register.



Mobile homes east of Iola that were rolled by the winds. They were at a dealership and hence, not tied down. ---Photo by Bruce Symes, The Iola Register.



A skating rink east of Iola that had its north wall blown in and part of its roof torn off. ---Photo by Bruce Symes, The Iola Register.

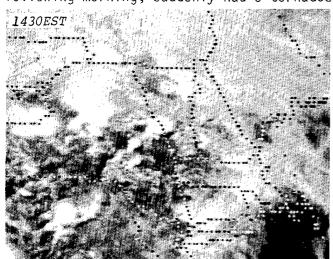


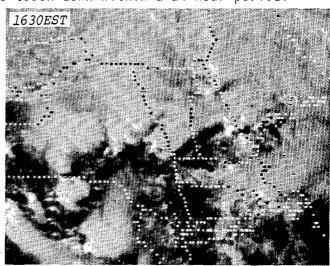
The site of a freight train derailment south of Moran where winds were estimated to have exceeded 100 mph. ---Photo by Thomas Long, The Iola Register.

---All photos on pages 11 through 14 were provided by the NWSFO at Topeka, Kansas.

#### 5. TORNADOES in NEW ENGLAND on August 7, 1986

On the afternoon of August 7th, a rare outbreak of 7 tornadoes occurred in New England. Although most of the tornadoes were weak - 5 were rated Fl and l was FO - and all were short-lived - none tracked farther than 4 miles - one carved its way through Cranston and southern Providence, Rhode Island causing F2 damage and 20 injuries along a 4 mile, intermittent path. Rhode Island had not had a tornado touch down within the state for 12 years, but with an F2 and Fl on this day and another Fl on the following morning, suddenly had 3 tornadoes touch down within a 24 hour period.





GOES 6 satellite, visible images of the tornado-producing storms over New England on August 7th. ---Photos from NESDIS.



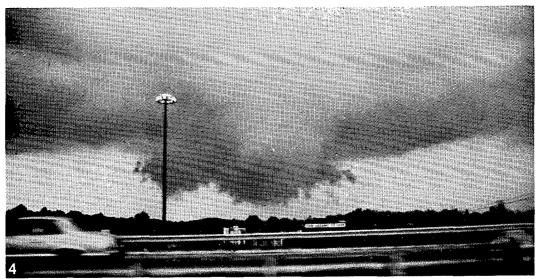
A four-story, jewelry manufacturing building in Providence that had its top story blown off by the tornado. Debris fell onto at least 30 cars in the adjacent parking lot. The building was vacant at the time of the tornado, so no injuries occurred at the site. ---Photo from the Providence Journal and provided by the NWSFO at Boston, Massachusetts.

On this and the following page, a sequence of photos depicts the Fl tornado that struck Bedford, Massachusetts during the August 7th, New England Outbreak. The tornado touched down on the civilian airfield at Hanscom Field where it flipped over 3 single-engine aircraft, and then continued northeast on a 4 mile, intermittent path through a residential area of southern Bedford. Photos 1, 2 and 3, taken from Megapulse Corp. in Bedford, show the tornado just after it left Hanscom Field. The views are south-southeast in photos 1 and 2, northeast in photo 3. Photos 4 and 5 showing the wall cloud of the storm after the tornado had lifted were taken looking north from I-95 near MA-38 in Woburn, and in a northeast direction from I-95 just south of MA-129 in Wakefield, respectively. --- Photos by Jim Harkins of Lynn, Massachusetts; provided by Peter McGurk, Weather Services Corporation, Bedford, Massachusetts.

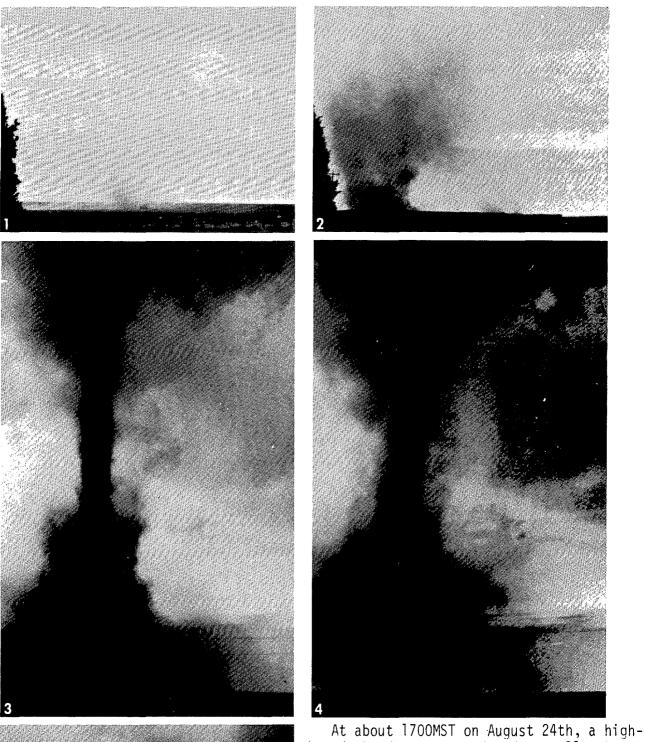














At about 1700MS1 on August 24th, a high-based thunderstorm produced a small, short-lived tornado in farm fields just northeast of Malta, Idaho. The event was captured in photos shown here by Mike Wheeler as the tornado passed by his home. Looking northeast from about 500 feet away, he observed the vortex as barely moving while drawing in debris, hay and tumbleweed during its 10 to 15 minute duration. The last photo, taken overhead after the tornado lifted, shows the remaining funnel drifting southward. ---Photos provided by Dave Miller, KIFI-TV, Idaho Falls, Idaho.

AUCUST 1986

<u> </u>	<u> </u>		AUGUST 1986
PLACE	TIME - LOCAL STANDARD ILENGTH OF PATH (TARDS) WIDTH OF PATH (TARDS) WILLED PROPERTY GROPS CROPS	PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (YAROS) WIDTH OF PATH (YAROS) WIDTH OF PATH (YAROS) CROPS C
1 ALABAMA	•	ALABAM	NA - Levings - ex
Troy, Pike County	01 1830CST 0 2 4 0 Thunderstorm/Wind Damage from thunderstorm winds included awnings ripped off several buildings, store windows broken, and some trees and powerlines blown down. Lightning touched off a few small fires. Flying debris struck two people and caused minor injuries.	Dallas County	OB IllOCST 0 0 5 0 Thunderstorm/Wind Downburst thunderstorm winds hit Graig Field in Selma. Damage included a single engine airplane ripped from its tiedowns and blown some 70 feet before coming to rest upside down, roofs damaged by winds and falling trees, and a guard shack blown over.
Mobile, Mobile County	O2 1311CST 2 0 ? ! Lightning Two teenagers were killed by a lightning bolt that struck a large oak tree in an open field near their homes, where they had sought refuge from a thunderstorm. Both victims were reported to have been unconscious	Colbert County	09 1515CST 0 0 ? ? Thunderstorm/Wind Some trees were blown down south of Muscle Shouls.  09 1715CST 0 0 3 0 Thunderstorm/Wind Thunderstorm winds damaged two barns and some chicken
	when paramedics arrived on the scene. One was pronounced dead on arrival at a hospital and the other victim died at OlOOCST August 3. Several fires were reported in the Mobile area due to lightning strikes. Lightning M160, M170.	Madison County	houses at Nellow Valley.
Mobile County	02 1320CST 0 0 3 0 Thunderstorm/Wind 02 1335CST 0 0 3 0 Thunderstorm/Wind 02 1335CST 0 0 3 0 Thunderstorm/Wind 02 1351CST 0 0 3 0 Thunderstorm/Mind 02 1410CST 0 0 ? ? Hail (0.75) 02 1415CST 0 0 4 0 Thunderstorm/Wind 02 manage from thunderstorm winds in the Mobile area included a building struck by a falling tree around 1320CST, a business building unrofed and another building	Brilliant area, Marion County	Thunderstorm winds damaged the roof of a building in Madison around 1915CST and heavy rains caused extensive damage to its contents. The roof of another manufacturing building in Madison collapsed during the heavy rain. Winds damaged a building in Huntsville around 1927CST.  10 1740CST 0 0 2 0 Thunderstorm/Wind Apparent thunderstorm winds downed a few trees near
,	struck by a failing tree around 1335CST, and other trees downed around 1351CST. Hail to 3/4 inch in diameter was reported at 1410CST in Mobile. The roofs of several apartment units were damaged in Saraland and some wind damage was reported on Dauphin Island at 1415CST.	Tuscaloosa County	Alabama 44 and one tree fell across the highway.  10 1945CST
Baldwin County	02 1355CST 0 0 4 0 Thunderstorm/Wind 02 1410CST 0 0 5 0 Thunderstorm/Wind Thunderstorm winds damaged the roof of a building on I-65 near Bay Minette at 1355CST. Damaging winds hit Gulf Shores around 1410CST, where four airplanes were	Colbert County	16 1239CST 0 0 ? ? Thunderstorm/Wind Thunderstorm winds gusted to 62 mph at the Muscle Shoals airport at 1239CST.
.50	ripped from their tiedowns. Three of the planes were reported to have been damaged and one destroyed. Marble size hail was also reported.	Winston County	16 1325CST 0 0 2 0 Thunderstorm/Wind   Some trees were reported to have been blown down in the Black Pump area south of Double Springs.
15E Brewton, Escambia County Covington County	02 1525CST 0 0 ? ? Thunderstorm/Wind Thunderstorm winds downed some trees and powerlines.  02 1605CST 0 0 ? ? Thunderstorm/Wind	Walker County	16 1330CST 0 0 2 0 Thunderstorm/Wind 16 1340CST 0 0 3 0 Thunderstorm/Wind Scattered wind damage was reported in the Jasper
,	0 0 ? Thunderstorm/Wind Trees were blown down on U.S. 29 in west Covington County around 1605CST. Large hail was reported south of Andalusia at 1620CST, where winds were estimated near 60 mph, and large tree limbs were ripped off.	Jefferson County	area at 1330CST and SE of Jasper toward Cordova around 1340CST.  16 1405CST 0 0 0 2 0 Thunderstorm/Wind 16 1424CST 0 0 3 0 Thunderstorm/Wind
Hodges, Franklin County	07 1723CST 0 0 ? ? Hail (0.75) Hail to 3/4 inch in diameter was reported.		16 1435CST 0 0 3 0 Thunderstorm/Wind Power company officials reported up to 20,000 howes were without power due to numerous trees and tree limbs being blown into powerlines as severe thunderstorms moved across the area. Most of the outages were in
Florence, Lauderdale County	07 1730CST 0 0 4 0 Thunderstorm/Wind Thunderstorm winds damaged a wall and the roof of a business building.  07 1750CST 0 0 3 0 Thunderstorm/Wind		the SE part of the Birmingham Metropolitan area. Wind gusts, estimated by a retired meteorologist to be near 70 mph, were reported from the west part of the metro area around 14056ST, and Skywarn spotters reported gusts estimated near 60 mph in the NE part of the metro
SE Colbert County  Lawrence County	Some trees were downed on a powerline and one tree was blown down on a mobile home.  07 1800CST 0 0 3 0 Thunderstorm/Wind	Limestone County	area around 1424CST. A street was reported blocked by fallen trees in the SE part of the area ground 1435CST.  16 1430CST 0 0 ? ? Thunderstorm/Wind
	97 1830CST 0 1 4 0 Thunderstorm/Wind Damage from thunderstorm winds across Lawrence County included farm buildings unroofed in the Courtland area around 1800CST, and a mobile home overturned near Caddo around 1830CST. A child was injured in the mobile home.	Madison County Morgan County Shelby County	16
Morgan County	Numerous trees and some powerlines were reported down in the county.  107 1815CST 0 0 4 0 Thunderstorm/Wind 07 1830CST 0 0 4 0 Thunderstorm/Wind 0 1830CST 0 0 4 0 Thunderstorm/Wind 0 1 1830CST 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		16 1455CST 0 2 0 Thunderstorm/Vind Some trees and powerlines were downed in the Inverness area of north Shelby Councy, around 1445CST and the Wilsonville area around 1455CST.
	07 1830CST 0 0 4 0. Lightning Damage from thunderstorm winds included a metal roof ripped off a building in Decatur around 1815CST and a home and a van damaged by separate falling trees in the Danville area around 1830CST. A home in the Hartselle area was	Pell City, St. Clair County	16 1455CST 0 0 2 0 Thunderstorm/Wind Some trees and powerlines were downed by thunderstorm winds. 16 1457CST 0 0 2 0 Thunderstorm/Wind
Limestone County	damaged by a fire that resulted from a lightning strike.  Or 1820CST 0 0 3 0 Thunderstorm/Wind 07 1825CST 0 0 7 ? Hail (1.75)  Some trees and powerlines were reported down mainly	Etowah County Piedmont	Wind gusts to 58 mph were recorded at the Emergency Operations Center and some trees were blown down in the area.  16 1528CST 3 L 4 0 Thunderstorm/Wind
Madison County	in the Tanner area around 1820CST and golf ball size hail was reported in extreme SE Limestone County at 1825CST.	Calhoun County	A man, his wife and one of their sons were killed, and another son was seriously injured, when a falling tree crashed into the passenger compartment of their car as they drove along a city street.
Cullmen County	07 1850CST 0 0 3 0 Thunderstorm/Wind Extensive tree and powerline damage was reported in SE Huntsville.  07 1900CST 0 0 4 0 Thunderstorm/Wind	Montgomery area, Montgomery County	The tree measured some 8 feet in diameter and was described as old, but apparently solid. Wind M??V, F40V, M10V.  16 1550CST 0 0 ? ? Thunderstorm/Wind 16 1610CST 0 0 ? ? Thunderstorm/Wind Thunderstorm winds downed some receive Moreoverstorm winds downed some receive Moreoverstorm winds
Collbran Gap,	Damage from thunderstorm winds near U.S. 31, north of Cullman, included the porch torn off one home and two mobile homes damaged by a falling tree.  Or 1930CST 0 0 ? ? Thunderstorm/Wind	Heflin,	Thunderstorm winds downed some trees in Montgomery around 1500GST, and on U.S. 31 south of Montgomery around 1610GST.  16 1555GST 0 0 4 0 Thunderstorm/Wind
DeKalb County	Trees were blown down and blocked the highway on Lookout Mountain south of Pt. Payne.	Cleburne County	The roof was blown off a house:  16  1610CST
<u> </u>			some powerlines were torn down.

			AUGUST 1986
PLACE	TIME - LOCAL STANDARD STANDARD STANDARD CROPS STORM CROPS STORM CROPS CROPS SNOW CROPS SNOW CROPS CROP	PLACE	STANDARD STANDARD STANDARD STANDARD STANDARD STANDARD CROPS
			TIM STA STA STA NIDI WIDI WIDI
ALABA	MA	ARIZON	Α
Helena, Shelby County	20 1530CST 0 0 4 0 Thunderstorm/Wind Thunderstorm winds caused minor damage to two homes and uprooted 10 to 12 large trees. One car was smashed by a falling tree.	Coconino County	13   1400 MST
Reform, Pickens County	20 1815CST 0 0 ? ? Hail (0.75) Dime size hail was reported.		Airport. Homes on the morth and south side of town had water damage. Some fences were torm down. Road damage consisted of gutted shoulders and blacktop. Rock slides near I-17 forced some cars off the road.
Demopolis, Marengo County	20 1824CST 0 0 ? ? Hail ((0.88) Nickle size hail was reported.	Yavapai County	14 1719 MST 0 0 0 0 Thunderstorm Wind
Dailas County	25 1615CST 0 0 ? ? Thunderstorm/Wind Thunderstorm winds downed some trees at Carlowville in extreme south Dallas County.	Pima County	Winds were clocked at up to 67 MPH at Sedona Airport.  16 2300 MST 0 0 5 0 Lightning
Fairhope, Baldwin County	26 1445CST 0 0 3 0 Thunderstorm/Wind Downburst winds blew the windows out of a commercial building. Occupants of the building reported that "the whole building shook" when the very localized winds hit the structure.	Apache County	Lightning struck a restaurant in Tucson, resulting in a fire causing extensive damage.  17 Afternoon 1 0 0 0 Lightning
Triana, Madison County	26 1510CST 0 0 ? ? Thunderstorm/Wind Thunderstorm winds downed some trees up to one foot in diameter.		A man was killed while walking away from a boat ramp at Hawley Lake. M280
Jefferson County	26 1700CST 0 0 4 0 Thunderstorm/Wind	Cochise County	17 2300 MST 0 0 3 0 Flash Flooding
	26 1716CST 0 0 ? ? Thunderstorm/Wind Thunderstorm winds gusted to 65 mph at the Birmingham Airport around 1700CST and wind gusts estimated at 60 mph were reported in the Roebuck		Very heavy thunderstorms struck the Bisbee area, producing rainfall of 1.10 inches in 25 minutes. Water and rocks covered part of U.S. 80 west of the Mule Pass Tunnel. The storms ended by dawn on the 18th.
	Plaza area of Birmingham around 1716CST. There was damage to the doors of one building and the root of another in the Tarrant City area just west of the	Maricopa County	19 1900 MST 0 0 4 0 Thunderstorm Wind
	airport. The large, slow-moving thunderstorm produced severe cloud to ground lightning in the NE part of the metro area. Electrical equipment was		Many power poles and power lines were knocked down in the Gila Bend area. A large area between Gila Bend and Ajo was left without power well into the following day.
	damaged in several homes. An interior wall in one home was reported to have been split open by a lightning strike.	Yuma County	19 2000 MST 0 0 2 0 Thunderstorm Wind Highway Patrol reported some roofs blown off in Dateland.
Lineville, Clay County	26 1740CST 0 0 3 0 Thunderstorm/Wind Some trees were reported blown down, and some lightning drawge was also reported.	Maricopa County	23 1800 MST 0 0 4 0 Thunderstorm Wind
Altoona, Etowah County	26 1758CST 0 0 2 0 Thunderstorm/Wind Some trees were reported blown down.		Two airplanes were damaged and a roof was blown off a shed as a strong microburst moved east to west through the Turf Soaring School. An anemometer was blown away after it was pegged at 90 MPH. Roads in Wittmann were washed out.
Morgan County	27 !300CST 0 0 ? ? Thunderstorm/Wind Some trees were blown down just east of Hartselle.	Maricopa County	23 2000 MST 0 0 3 0 Lightning
			Lightning struck a transformer and sparks set fire to a nearby roof of a home in Phoenix.
<sup>2</sup> ARIZONA		Pinal County	25 1900 MST 0 0 3 0 Thunderstorm Wind
Pima County	01 1700 MST 0 0 ? 0 Thunderstorm Wind		Police in Apache Junction reported power lines down due to strong winds. Roofs were torn off, became airborne, and cut through the power lines.
	Downburst winds struck downtown Tucson. Wind gusts were estimated to be between 50 and 55 MPH.	Maricopa County	26 1858 MST 0 0 2 0 Thunderstorm Wind
Maricopa County	02 2100 MST		A few branches and trees were downed in Circle City. 2.60 inches of rain fell in one hour.
	Strong thunderstorms developed over the central mountains and moved to the south and west. A strong microburst formed along Carefree Highway west of 1-17. Some buildings were damaged at	Cochise County	27 0845 MST . 0 0 2 0. Flash Flooding Over 2 inches of rain fell in Sunsites-Pearce area in about 3 hours.
	Turf Soaring School, but several gliders within 100 yards were not damaged. Estimated winds were in excess of 65 MPH.	Pinal County	U.S. 666 flooded, with many cars washed off the road.  27 2000 MST 0 0 2 0 Flash Flooding
Pima County	02 2100 MST 0 0 3 0 Thunderstorm Wind  Sheriff's office in Tucson reported trees and power lines downed on the northeast side of town.	Maricopa County	McCartney Road near Casa Grande flooded. A spotter in Tempe re- corded 1.16 inches of rain in just 30 minutes; Apache Junction had .50 inches in 30 minutes.
Pima County	09 2000 MST 0 0 3 0 Thunderstorm Wind	Maricopa County	28 2000 MST 0 0 5 0 Lightning, Thunder- storm Wind
	Tucson International Airport clocked winds gusting to 56 MPH. Roofs were damaged and power lines were downed in southern sections of the city.	i gan	John C. Lincoln Hospital in Phoenix had to evacuate patients as lightning struck a transformer and resulted in a fire. Lightning also knocked out electricity to Humana Hospital in Phoenix. Winds
Gila County	10 1800 MST 0 0 2 0 Flash Flooding Heavy thunderstorms caused rock slides along U.S. 80 west of Miami.		up to 70 MPH knocked down trees and power lines in a large area between Scottsdale and Glendale. A Glendale spotter recorded 3,36 inches of tain in 3 hours. Many streets flooded on the town's north side. One area north of Camelback Mountain had 5.53 inches
Pinal County	11 1750 MST 0 0 4 0 Thunderstorm Wind	Maricopa County	of rain from the storm.
	Strong winds damaged sheds, farm equipment, and roofs near Apache Junction and southeast of Chandler. Some mobile homes were overturned, trees were uprooted.	marteopa county	29 ,2130 MST 0 2 5 0 Thunderstorm Wind Severe thunderstorms struck east Mesa with most of the damage at a large mobile home park on Baseline Road. Some power poles were
Mohave County	11 1800 MST 0 0 3 0 Thunderstorm Wind	Yavapai County	Rnocked down
	Strong winds downed power lines and heavy rains produced street flooding in Bullhead City.		A small funnel cloud was sighted over Chino Valley, north of Prescott.

** ***			AUGUST 1986
PLACE	TIME - LOCAL STANDARD CHARTH OF PATH WITH OF	ARD - LOCA!	NO. OF ESTIMATED' DAMAGE  CHARACTER OF STORM  STORM
3 ARKANSAS		ARKANSAS	
Crittenden County	01 UNK 1 0 High Heat	Senton County 02 0030CST	0 0 Rail (1.75")
	The Arkansas Health Department reported a death	Golfball-size hail fell betw	een Gentry and
	in the county due to high temperatures - an 80-year old female.	Siloam Springs, according to Department.	the Highway
Baxter County	01 2010CST 0 5 5 - Thunderstorm Wind	Senton County 02 0100CST	0 0 - , - Thunderstorm Wind
	An auction house in Gassville was unroofed by strong winds, injuring 3 persons. A dozen	The Siloam Springs Fire Depa power outages and trees know	
	vehicles were damaged as well by debris from the roof. In nearby Mountain Home, a bait company was unroofed as well as a house. A	rawford County 02 0115CST	0 0 Thunderstorm Wind
	boat dock was destroyed on Bull Shoals Lake in the Theodosia area. Approximately at the	The Van Buren Fire Departmen were uprooted and power line	
	same time, atractor-trailer rig was overturned on Veterans Memorial Bridge, 7 miles east of	well as damage to small outb	
	Mountain Home, crossing Lake Norfork. Two persons in the truck were injured.	ebastian County 02 0123CST	0 0 Thunderstorm Wind
Fulton County	.01 2040CST 0 0 - Hail (1.50")	Wind gusts were clocked up t Fort Smith Weather Office.	Some tree and
w	Walnut-sized hail fell at Salem.	roof damage was reported in ladison County .02 0130CST	Fort Smith.  O ? - Thunderstorm Wind
Marion County	01 2040CST 0 0 - Thunderstorm Wind  The State Police reported tree limbs blown down	The Sheriff's Office reporte	d power lines and
	in Buffalo Point, with trees and power Rines down at unspecified areas of the county.	trees down across streets in Several cars were damaged by	
Izard County	01 2045CST	doone County 02 0135CST	0 0 Thunderstorm Wind
	01 2045CST 0 0 - Hail (unknown)  Trees fell across Arkansas Highway 56 between	The Sheriff's Office reporte blocking roads in Harrison.	d downed trees
	Calico Rock and Brockwell. At the same time, 3 vehicles received hail damage on Highway 9,	ohnson County 02 0215CST	0 0 ? - Thunderstorm Wind
	south of Melbourne.	The Arkansas State Police re	
Searcy County	01 2055CST	ranklin County 02 0230CST	0 0 ? - Thunderstorm Wind
	Three-quarter-inch diameter hail fell at Marshall.	The Civil Defense reported duprocted trees, along with s	
	Also, lightning started a house fire eight miles north of Marshall.		0 0 Thunderstorm Wind
Fulton County	01 2100CST 0 4 ? - Thunderstorm Wind	The police department report	
	Four persons were injured in Mammoth Spring as homes were unroofed and trees were knocked down.	down in Conway.	0 0 Thunderstorm Wind
Sharp County	01 2100CST 0 0 ? ~ Thunderstorm Wind	A tree was blown down in wes	The first of the second of the second
	A large tree fell on a home near Hardy. Trees, utility poles, and power lines were blown down throughout the area.	according to a report from t the intersection of Markham Shackleford Road.	
Stone County	01 2105CST 0 0 Thunderstorm Wind	ogan County 02 0330CST	0 0 Thunderstorm Wind
	The Sheriff's Office reported trees and power lines down at several parts of the county.	The Civil Defense reported t down at Caulksville.	rees and power lines
Independence County	01 2125CST 0 0 - Thunderstorm Wind	loward County 04 1300CST	0 0 3 - Dust Devil
	Personnel from the airport at 011 Trough reported clocking winds at 64 MPH. Trees and power lines	An unusually strong circulat	ion developed on a
	were knocked down in Batesville and other parts of the county.	clear, hot; and calm summer dust devil tore off 36 feet from a poultry house in Athe	of tin roofing
Lawrence County	01 2130CST 0 0 ? Thunderstorm Wind	were torn off and carried aw	ay by the whirlwind.
	Trees and power lines were blown down in Hoxie and Walnut Ridge; as well as in the western	lashington County 05 2345CST  Lightning struck a Fayettevi	0 0 4 - Lightning
	section of the county	50% of the second floor was ensuing blaze.	
Randolph County	01 2130CST 0 0 - Thunderstorm Wind  Trees were blown down in Pocahontas.	Washington County 06 0010CST	0 0 6 Thunderstorm Wind.
Van Buren County	01 2138CST 0 0 - Hail (1.00")	A severe thunderstorm caused in Gem, near Lincoln, by unr	
	One-inch diameter hail fell at Clinton.	and damaging the roof of and homes and two poultry houses	ther. Two mobile were destroyed.
Jackson County	01 2155CST 0 0 Hail (1.00") 01 2155CST 0 0 ? - Thunderstorm Wind	Sheds, carports and other st damaged. Wind gusts of 58 MF the Fayetteville airport.	
	Trees and power lines were blown down in Newport, Tuckerman, and Swifton. A tractor-trailer rig	reene County 07 1310CST	0 0 4 - Thunderstorm Wind
	was blown off, Highway 67, 3 miles south of Newport	Gusts unroofed a tin shed an building and a saw mill in E	alliday, about 5
Crittenden County	01 2255CST	miles north of Paragould. I mill alone were estimated be \$10,000.	
	A mobile home in West Memphis was damaged heavily by a falling tree. The tree unroofed	1,23,000	
	a large portion of the home and trapped a seven- year-old boy in his bedroom for one hour. The boy had a minor cut requiring eight stitches.		
	And the second s		

ARKANSAS  Water Control  10 1 6 - Tunderstorm wind  11 AMEN 10 5 6 6 minute (TT)  Water Annu would 30 MB demandable cligit language  was an an information of section of the control  line with blood set all cross sections  was all the control of the control of the control  was all the control of the control of the control  was all the control of the control of the control  was all the control of the control of the control  was all the control of the control of the control  was all the control of the control of the control  was all the control of the control of the control  was all the control of the control of the control  was all the control of the control of the control  was all the control of the control of the control  was all the control of the control of the control  between the control of the control of the control  was all the control of the control of the control  between the control of the control of the control  was all the control of the control of t	PLACE		DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	KILLED		PROPERTY TY		CHARACTER OF STORM		PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. PERS	ONS	DAMAGE  A DAMAGE  A DAMAGE	CHARACTER OF STORM
A condo named one of the services of graphic (al.). The condition of the c	ARK	ANS	A\$							• • .	1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		5 COLORADO							**	۸.
at the Series Activet. The plants were considered.  The series interes will be compared to the plants are not for the first better and the series of the first better and	White County		07	1330CST			0	1 .	6	- 1	Thunderstorm Wind	ŀ	Baca County	1 1 A tor	442MST nado to		40 own 10				
Jackson Coasty  Of 15000T C 1.7 Theoderecon Wind Casts were sinched at 100 Will at the Manyons Alegant. Three largest war descript. At Each largest war descript.  At 1 DRA  At 1 DRA  At 1 DRA  The Annies Bankin Busin Copyright of the Manyon Interest of Manyon Interest	at the Searcy Airport. Six planes were damaged and six others were destroyed. Trees and power lines were knocked down all across Searcy. One man was injured when a tree fell on his home. Several homes had roof damage, and several businesses had broken plate-glass windows.  Many utility poles were knocked down. About the											1 1/2 inch hail fell in Colorado Springs, along with heavy rain that caused some street flooding.  1 evening 0 0 2 4 Heavy rain, Ha: Heavy rain drenched the Arkansas River Valley from the La Juntarea east to the Kansas border. 2 to 5 inches of rain poured						with heavy rain  Heavy rain, Hail  from the La Junta  of rain poured  amaged nearby			
Little Country   10 M	Gusts were clocked at 100 MPH at the Newport										Thunderstorm Wind			corn crops. Later in the evening, around 2 inches of rain in about an hour at Lamar and Holly. 150 city blocks were flooded in central Lamar, and both principal highways throu					blocks were		
The Advances Markith Reportment reported a death In the country due to high temperatures - an Diversified the personner reported a death In the country due to high temperatures - an Diversified the personner reported a death In the country due to high temperatures - a Clebures Country  To diversified the personner reported a death In the country due to high temperatures - a Clebures Country  To diversified the personner reported a death In the country due to high temperatures - a Clebures Country  To diversified the personner reported a death In the country due to high temperatures - a Clebures Country  To diversified the personner reported a death In the country due to high temperatures - a Clebures Country  To diversified the personner reported a death In the country due to high temperatures - a Clebures Country  To diversified the personner reported a death In the country due to high temperatures - a Clebures Country  To diversified the personner reported a death In the country due to high temperatures - a Clebures Country  To diversified the personner reported a death In the country due to high temperatures - a Clebures Country  To diversified the personner reported a death In the country due to high temperatures - a Clebures Country  To diversified the personner reported a death In the country due to the death In th			leas fami beca and and	t 6 airci lies from use theim power lim Newport.	aft we Diaz apart es wer Some	re seve had to ments w e blown buildin	rely d seek t ere un down gs wer	amage empor roofe in Di	d. Two ary she d. Tre az, Gru	lter es bbs,				1.35 with some house	inches widespr interse suffer	of rain ead str ctions. ed \$15,	et flo There	n just oding were er dar	t 15 mi . Wate also p mage in	inutes at er was sev power outa n the base	Colorado Springs eral feet deep in ges, and one ment.
Shipse Genery  15 TEX 1 0 - Righ thest The decisioners Mailth Reparament regarded death in the country does to high suspensioners - a C2-year-roll (reads.)  Cloburne Country  27 13355T 0 0 7 - Thunderstorm Wind Three and power listes were known from the country of the State Narring Points.  Printis Country  27 13355T 0 0 7 - Thunderstorm Wind Wind guste were clocked at M Wife at the State Narring Points.  28 13355T 0 0 7 - Thunderstorm Wind Wind guste were clocked at M Wife at the Stategast A country.  29 13355T 0 0 7 - Thunderstorm Wind Wind guste were clocked at M Wife at the Stategast A country.  20 1 Thunderstorm Wind Wind guste were clocked at M Wife at the Stategast A country.  20 2 Thunderstorm Wind Wind guste were clocked at M Wife at the Stategast A country.  20 2 Thunderstorm Wind Wind guste were clocked at M Wife at the Stategast A country.  21 13355T 0 0 7 0 Thunderstorm Windows and Install A country wind by wind the windows in Thunderstorm A country  22 13355T 0 0 7 0 Thunderstorm Windows and Install A country windows in Thunderstorm Windows A country Windows and Install A country Windows Windo	White County	*	The .	Arkansas he county	due t	o high	ment r	eport	ed a de		High Heat		riont range	A maj Front Palme devel many	or outb: Range or Divide oped exp areas w	reak of of Colo e betwe plosive ith lar	rado fr en Denv ly and : ge hail	thund om the er and moved and h	derston e Wyomi d Colon rapidl neavy n	rms occurr ing border rado Sprin ly southea rain. Man	ed along the south to the gs. Thunderstorms stward, pummeling y spots, including
California County  1 137557 0 0 7 - Thonderstorn Wind  Treas and gover lines were bloom down term  County  2 1 135557 0 0 7 - Thonderstorn Wind  Wind gusts were clouded at \$1 878 at the Stotagest Altyport, just south of Slovek. There was  warperlifted damage to Managest.  4 CALIFORNIA, Northern 800% REPORTED  4 CALIFORNIA, Northern 800% REPORTED  4 CALIFORNIA, Southern  CADIS  3 133577 0 0 7 0 Thonderstorn  Highway 18 was closed between Lacentre Villey and Baldort Lake for  Carbony  Canny  Canny  Cadis  3 1 1737977 0 0 7 1 Bigh Winds  Windows or washed for the processal of the Winds of the Cannel County  And the California County  A california County	White County		The	Arkansas he county	due t	o high	ment r	eport			High Heat			hail Hail Longm in La corn	twice. caused ont, Planting, I rimer, I and other	widespr attevil Boulder er crop	ead dam le, Win , and W s were	age to dsor, eld Co destro	o homes and ma ounties oyed in	s and cars any other s. Thousa n those co	in Fort Collins, cities and towns nds of acres of unties. Crop
Printing Country  27 1950ST 0 0 ? - Thunderstorm Nied  Wind garden were clusted and 20 Mile at the Stategart  Wind printing over clusted and 20 Mile at the Stategart  Wind California State and 16 Mile at Winds in eastern Admin County.  Wind California State and fell of the city of Skythm. Winds  were activated at preacter than 90 mb.  Cascilla  Wind Printing over were downed in the Yound State University  over a Stategart clusted by the ranger states of the Stategart  Wind California State and 16 Mile at Winds in eastern  Larieur County.  Wind California State and State University  over a Stategart clusted by the capture of Skythm. Winds  were activated at preacter than 90 mb.  Cascilla  Wind California State and State University  over a Stategart clusted by the capture of Skythm. Winds  were activated by the capture office.  Wind California State and State University  over a Stategart clusted	Cleburne County		Tree	s and por	ver lin Ording	es were to the	0 blown State	down Warni	near ng Poin		Thunderstorm Wind			an es Weste on In windo	timated rn Adam terstat ws in T	25 mil s Count e 25 we nornton	lion do / was a st of B	llars. lso hi righto	it hard on, and	d; hail br d the larg	oke car windows e stones broke
4 CALIFORNIA, Southern  ACADIS  ACADIS  ACADIS  A 12 1337877 0 0 ? 0 Thunderstore Sin Rernardiano County  Inches 12 1337878 0 0 ? 0 Thunderstore CAZDIS  Riverside County  A readway was weaked out in southern Joebus Tee National Monument, north of Interstate 10.  A readway was weaked out in southern Joebus Tee National Monument, north of Interstate 10.  A readway was weaked out in southern Joebus Tee National Monument, north of Interstate 10.  CAZDIS  Riverside County  A readway was weaked out in southern Joebus Tee National Monument, north of Interstate 10.  CAZDIS  Riverside County  A readway was weaked out in southern Joebus Tee National Monument, north of Interstate 10.  CAZDIS  Riverside County  A readway was weaked out in southern Joebus Tee National Monument, north of Interstate 10.  CAZDIS  Riverside County  District County  A readway was weaked out in southern Joebus Tee National Monument, north of Interstate 10.  CAZDIS  Eliverside County  The Notational Major Flooding occurred and strong winds blaw down several palm traces in Pain Springs. The Pain Springs alipert reported winds of Up to 35 inches.  CAZDIS  Sun Bernardino  COUNTY  CAZDIS  San Bernardino  COUNTY  The Monument of the County of Tee National Monument, north was allightly injured.  1555  Colfhall size hall fell at Currer Lake in southeast Elbert County.  1550 (Colfhall size hall fell at Watkins in western Adms County.  1555  Colfhall size hall fell at Belluk in country was slightly injured.  1550 (Colfhall size hall fell at Port Collins, in eastern Lariener County.  1555  Colfhall size hall fell at Fort Collins in eastern County.  1559  Colfhall size hall fell in Country was specified of the city of Big Bear. Minor flooding was reported by the cangers of tee.  CAZDIS  San Bernardino  County  The Nojave sheriff reported minor urban flooding, 1/2 to 1 inch  of rain fail in one hour.  CAZDIS  CAZDIS  A colfhall size hall fell in Meastern Adms County.  1550 (Colfhall size hall fell at Port Collins, in eastern Lariener County.  1551  1555 (Colf	Prairie County		Wind Airp	gusts we	south	of Slo	82 MP	O Hati	? the Stu					Torre eveni contr area. broke Six p hails estim	ntial r ng, esp ibuted Almos n, and eople, itones i	ain fel ecially along w t all n power w includi n Longm about	around ith the orth-fa as out ng two ont. T 70 mill	Fort hail cing w in the police total of ion de	Luptor to the windown e town emen, windown damage ollars	n and Plate e massive s in Plate for two h were injur	teville, and crop damage in the eville were wours. and by the large storm was
Adams County.  Adams County.  Adams County.  Adams County.  130-14-26 Gol Thall size hall fell near Byers in eastern Arapahoe County.  1310-14-26 Gol Thall size hall fell near Byers in eastern Arapahoe County.  132 1355787 0 0 ? 0 Thunderstorn eleven hours for the removal of hundreds of tons of aits and boulders.  Acailly also an actuated between Lacerne Valley and Baldwin Lake for eleven hours for the removal of hundreds of tons of aits and boulders.  A readway was washed out in southern Joshum Tree National Monument, north of Interstates 10.  CAZO18  Riverside County  A readway was washed out in southern Joshum Tree National Monument, north of Interstates 10.  CAZO18  Riverside County  A readway was washed out in southern Joshum Tree National Monument, north east Boulder County.  A readway was washed out in southern Joshum Tree National Monument, north elevents Boulder County.  A readway was washed out in southern Joshum Tree National Monument, north elevents Boulder County.  A readway was washed out in southern Joshum Tree National Monument, north elevents Boulder County.  A readway was washed out in southern Joshum Tree National Monument, north elevents Boulder County.  A readway was washed out in southern Joshum Tree National Monument, north elevents Boulder County.  A readway was washed out in southern Joshum Tree National Monument, north elevents Boulder County.  A readway was washed out in southern Joshum Tree National Monument, north elevents Boulder County.  Bigling Section 1920 0 0 ? Bigh Winds  Riverside County  Bigling Section 1921 1 1/2 inch hall fell at Washins in western Atams County.  CAZO18  CAZO18  21 1700PST 0 0 0 ? O Thunderstorn  San Bernardino  County  CAZO19  22 1500PST 0 0 0 ? O Thunderstorn  San Bernardino  County  A unknown 0 0 ? O Thunderstorn  Street Linceding occurred in the coun of Essex. Route 66 was closed to the fermion and U.S. Highway 5 was closed for 2 hours west of National Monument.  CAZO19  23 1600PST 0 0 0 ? O Thunderstorn  Street Linceding occurred in the coun of Essex.	4 CALIFOR	NIA	, No	rthern	,	NONE R	EPORTE	:D						along Time M	the Fro	nt Rang	e on Au	gust	2nd:		
CAZ013 San Bernardino County  Highway 18 was closed between Lucaries Valley and Baldwin Lake for eleven hours for the renoval of hundreds of tons of sit and boulders.  CAZ013 Riverside County  A readway was washed out in southern Joshua Tree National Monument, north of Interatate 10.  CAZ018 Riverside County  CAZ018 Riverside County  Minor Floading occurred and strong winds blew down several palm trees in Palm Springs. The Palm Syrings atrport veported winds of up to 55 Moots.  CAZ018 Riverside County  CAZ018  CAZ018  CAZ019  CAZ018  CA	4 CALIFOR	NIA	, So	uthern				•	**		•			1	A	dams Co	unty.				
Riverside County  18 unknown 0 0 ? 0 Thunderstorm A roadway was washed out in southern Joshua Tree National Nonusent, north of Interstate 10.  CAZO18  Riverside County  Minor flooding occurred and strong winds blew down several palm trees in Palm Springs. The Pale Springs airport reported winds of up to 55 knots.  CAZO18  Riverside County  CAZO18  Riverside County  CAZO19  CAZO10  CAZO19  CAZO19  CAZO19  CAZO19  CAZO10  CAZO19  CAZO10  CAZO10	San Bernardino		Highw eleve	ay 18 wa n hours	s close for the	d betwe	en Luc	erne	Valley	and	Baldwin Lake for			1523	1 1 0	ounty. inch h inch h ounty.	ail fel ail fel	lati	Beulah Carter	in south	est Pueblo County, coutheast Larimer
CAZOL8 Riverside County  Minor flooding occurred and strong winds blew down several palm trees in Palm Springs. The Palm Springs airport reported winds of up to 55 knots.  CAZOL8 Riverside County  CAZOL8 Riverside County  CAZOL8 CAZOL8 CAZOL8 Riverside County  CAZOL8 CAZOLS		y	A roa	dway was							,				. c G C	ounty. olfball ounty.	size h	ail fe	ell at	Watkins i	n western Adams
CAZO13 Riverside County  21 1700PST 0 0 ? 0 High Winds Southern California Edison engineer reports indicated that eight transmission towers were downed in the vicinity of Blythe. Winds were estimated at greater than 90 mph.  CAZO13 San Bernardino County  CAZO19 San Bernardino County  The Mojave sheriff reported minor urban flooding, 1/2 to 1 inch of rain fell in one hour.  CAZO18  CAZO19  CA		y	Minor	floodin in Palm	Spring		stron	ng win	ids blev	w dow	n several palm			1545	n S P L	ortheas lightly ing pon arimer	t Bould injure g ball County,	er Cou d, size I	unty. hail fe	A man on ell at Bel	a tractor was
CAZO13 San Bernardino County  CAZO19 San Bernardino County  The Mojave sheriff reported minor urban flooding, 1/2 to 1 inch of rain fell in one hour.  CAZO18  CAZO19 CAZO19 CAZO18  C		у	South	ern Cali mission	towers	were do	engine wned i	eer re In the	ports :	indic	ated that eight			1555	d G L P	amaging olfball arimer ing pon	cars. size h County. g ball	ail fo	ell at hail fe	Fort Coll	ins in eastern
CAZ019 San Bernardino County  26 unknown 0 0 ? 0 Thunderstorm  Street flooding occurred in the town of Essex. Route 66 was closed in the afternoon and U.S. Highway 95 was closed for 2 hours west of Needles.  CAZ019 CAZ019 CAZ019 The Mojave sheriff reported minor urban flooding. 1/2 to 1 inch of rain fell in one hour.  CAZ018 CAZ0	San Bernardino County		Quart	er size			he cit	y of							620 2	ampus i /4 inch astern inch h	n town, hail f Larimer ail fel	ell 10 Count	O miles ty. I-25 a	s E of Red	Feather Lakes in
Kern County The Mojave sheriff reported minor urban flooding, 1/2 to 1 inch of rain fell in one hour.  CAZO18 CAZO18 27 1710PST 0 0 ? 0 Thunderstorm Adams County.  about 1700 Numerous funnel cloud sightings were reported around Aurora.  about 1700 3/4 inch hail fell in Wellington in southeast Larimer	CAZ019 San Bernardino		Stree in th	t floodi e aftern					of Esser	x. R	oute 66 was closed			1617	e 1 B G	xtreme 1/2 to righton olfball	2 inch in ext size h	st Ada hail reme n ail fe	ams Con fell ( northw	unty, on I-25.be est Adams	tween Lafayette and County.
CAZO18 27 1710PST 0 0 ? 0 Thunderstorm about 1700 3/4 inch hail fell in Wellington in southeast Larimer			The M	lojave sh			0 I minor	-							A 1700 N	dams Co umerous	inty.				
		у	}		g occur	red in	0 Sky Va	0 alley.	? (	0	Thunderstorm				A 1700 3	urora. /4 inch					

																				AUGUS	T 1986
	PLACE	DATE TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	Ę L	NO. OF PERSONS	ESTIMAT DAMAI		CHARACTER OF STORM		PLACE	DATE	TIME - LOCAL STANDARD	FNGTH OF PATH	(MILES)	WIDTH OF PATH (YARDS)	KILLED	INJURED SAUS	PROPERTY		CHARACT OF STORM	
	COLORAI	00					• •		H	COLORA	00							•			1
		1705	Golfball	size hai	l fell a	t Platte	eville	e in southwest		Moffat County		1515MS					0			Tornado (FO)	
		1712	Weld Cou	-	l in For	t. Collin	ns in	southeast Larimer				tornado t miles so							es in	a wheat fiel	lđ
.		1715	County.					ity in western		Larimer County		1430MS		Twiń	lesnre	0 ad now	0 mer out	4.		Lightning t Collins	
۱			Adams Co	unty.	•				11	El Paso and Pueblo	1	1830-200				_	0			Svr. tstms.	
		1716	County.					utheast Larimer		Counties .	Sp	rings are	a. 1	In Pa	lmer	Park,	2 incl	hes fe	ll in	the Colorad just 35 minu	ites.
		1730	County.			-		utheast Boulder		•	đa	maging se	vera.	l roa	ds.	3/4 in	ich hai	il·fel	lat 1	some cars ar 835MST. ust of 61 mg	- 1
	. *	1740	1 inch h County.		near Eli	zabeth	in wes	stern Elbert		,		41MST and			inch	of rai	in.			•	
.		1812	3/4 inch Boulder		l just N	of Lon	gmont	in northeast		Sedgwick County	Li		starte	ed a						Lightning lesburg, cau	using
		1832	1 1/2 in Weld Cou		ell near	Erie i	n extr	reme southwest		El Paso County		avy damag 1400MS			•	0 ·	0	0	0	Hail	
		1835	3/4 inch County.	hail fel	1 at Buc	keye in	easte	ern Larimer			3/	4 inch ha	ail p				deep	at Bl	ack Fo	rest; the ar	rea
		1850-1855		o golfbal Adams Cou		ail fel	1 in N	Northglenn in			•	•				-					
		about 1900						chicles in a term Adams County.													. !
			1 inch h							6 CONNECTIC	UT							٠.			
		1914	Adams Co	unty.		٠.		ity in western		Fairfield County	07	Aftern	con			0	D	3		Lightning a Heavy Rain	nd
		1914 1915		ail fell				**	П	•										area as hea no houses we	
		1915	,	ch hail f			-	ton Airport. utheast Larimer		* * * * * * * * * * * * * * * * * * *	fl.	by ligh odding oc	tning curre	; in	Bride	enort,	causi.n	ig mino	or dama in the	ge, Street Stamford a	. '
		1915 1925	1 1/2 in		ell 4 1/			ollins airport.  Parker in north-	-	Fairfield, New Haven, Middlesex, New London and Windham Counties	08	Mormin Aftern				. ,	0.	4	3	Lichtning a Thunderston Winds	
		1955	3/4 inch			ast of	Aurora	ı in westerm		windish coducies										some 30,00	
		1955	2.24 inc	hes of ra western W	in fell eld Coun	in 25 m ty; 1.13	inutes 2 inch	s at Platteville nes fell in 10			at li	0930EST. nes and d	In estro	Balt.	ic, the	unde <b>rs</b> no <b>rt</b> ,	torm w Also,	inds o	lowned Lainfic	re a barn a trees and n ld, 120 acr fects of th	ower es of
		2030 /						the ground to southwest Weld			sti ea:	rms were	felt	fro	n the	south	west p	ortion	of th	ne state to ning-ignite	the
-			_				_		11,	Litchfield County	24	All da	y			٠0	0 .	3	0	High Winds	
	Weld County	2 1850 A tornado damaged a	touched d	lown 4 mil		3 east of		Tornado (Fl) gsdale and			sn		wer 1	ines	and	result				rees and br	
	El Paso County	Pevton at	storm prod 1520MST. Springs at	l inch h : 1530MST.	ail fell Lightr	10 mil	ph3r es non used po	Svr. tstms. miles west of rtheast of ower outages in		1 DEL AWADE					:						
	Lincoln County	3 1648MS	ST 1/2	30	0 0	0	0 :	Tornado (F1)	П	7 DELAWARE	1			•							
ı	Yuma County	A tomado 3 1800-1			[ly 2 mi] 0 0			imon. FPP101 Tstm. winds	$\ $	Sussex County	-	1200- 1900ES1						4		Hurricane	
		A thunder	storm prod	luced wind	l gusts e	stimate	d at 6	60 mph at Idalia.				mph winds								building dan	mage
	Weld County	4 1350Ms A gust of			0 0 ed at Bri			Tstm. winds		ů.	•										.
	Mesa County	4 1619M Agust of	60 mph wa			Junctio	m.	Tstm. winds		8 FLORIDA											
	Pueblo County	8 2019M A gust of few power	63 mph wa	s recorde	0 0 ed at Pue stern sub	blo air	port.	Tstm. winds There were a city.		Pinellas Co.	A :	1300ES 59 year	old	wom	a∙n wa	O Is sti	1 ruck	0 and i	njure	Lightning d by	,
	Pueblo County	10 1516 1 inch ha			0 0	0.	0 1	Hail		Citrus Co.		ntning 1700ES		e 5	tand	-	Tre.		0	nd Beach. Thundersto wind	
	Elbert County	10 1825 1 inch ha		miles no	0 0 rtheast			Hail .											seve	ral trees	
	Baca County	14 03348 Golfball		fell just	0 0 north			Hail d.		Manatee Co.	ĺ	power 1715ES				•			•	Tornado (I	F0)
	Adams County	14 1450 1 inch ha		t Strasbu	0 0	0	0 1	Hail			Α.	arm she				14					
	El Paso County	area. 1.	nail fell 54 inches	in the wo	ell in o	rt of tone part	he Co.	Hail, Heavy rain lorado Springs own, and there		Manatee Co.		1915ES			30	0	0 .		٠.	Waterspout Tornado (I	
	Qunnison County	was local fell on the	ne summit	To the of Pikes	west of Peak.			inches of snow High winds			da	aterspo naged se	ut o evera	ame 1 s	asho ailbo	re in	n Bra	dento	n Bea	ch and	
		A gust of		s recorde						•											

			AUGUST 198
PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (MILES) WIDTH OF PATH (ARDS) WIDTH OF PATH (ARDS) CROP S	PLACE	TIME - LOCAL STANDARD CROPS CR
FLORIDA		FLORIDA	A the second of
Suwanee Co.	02 UNK 0 0 3 - Thunderstorm	St. Lucie Co.	28 1315EST 1.0 30 0 0 3 - Tornado (FO)
· ·	Wind High wind blew down a greenhouse.	-	A tornado damaged a house and destroyed a screened patio.
Monroe Co.	02 0900EST	Martin Co.	28 1320EST 1.0 30 0 0 4 - Tornado (FO)
	A 26 year old man was injured when lightning struck a tree under which he was standing.	naroth oo.	A tornado was sighted as it went through a palm
Escambia Co.	02 1215CST 0 0 Hail (0.75)	Polk Co.	nursery.  30 1530EST 0 0 2 - Thunderstorm
	Hail 0.75 inches in diameter was reported in North Pensacola.		wind
Indian River Co.	03 1730EST. 1 0 0 0 Lightning		The roof of a mobile home was damaged by high wind. A carport roof was also destroyed.
	A 33 year old woman sought shelter from a thunder- storm under a tree and was killed when lightning struck the tree.	Manatee Co.	31 1700EST 0 0 3 - Thunderstorm wind
Duval Co.	04 1430EST	Monroe Co.	High wind blew the roof off of a back porch.  31 2235EST 0 0 Thunderstorm
24441 207	A man working near a tree was injured by either		wind
	lightning or debris from the tree when the tree was struck by lightning.		A wind gust to 54 knots was recorded at Cudjoe Key air station.
Collier Co.	05 1510EST 0 0 - Thunderstorm wind		
	Wind gusting to 56 knots was recorded.		
Okaloosa Co.	08 1530EST ' 0 0 4 - Thunderstorm wind	9 GEORGIA	
	High wind destroyed a large storage building four miles north of Baker.	Cobb County	01 0100- 0. 0 5 0 Lightning 0300EST
Lee Co.	09 1630EST 1.5 200 0 12 6 - Tornado (F2)		At least seven fires were caused by intense lightning in Cobb County. A workshop was destroyed, four houses were damaged, a
**;	Twelve people suffered minor injuries in a tornado. Forty-homes suffered major structural damage and 117 homes were damaged in Cape Coral and North Fort		motel damaged, and several businesses in the top floor of a business building gutted by the fires.
n. 13 0	Myers.	Fulton County	01 0130EST 0 0 4 0 Thunderstorm winds
Pinellas Co.	10 1700EST 0 0 3 - Thunderstorm wind		Thunderstorm winds downed trees in scattered locations across the northern Atlanta Metropolitan area. Unusually frequent lightning strikes knocked power out in many areas.
	High wind ripped the roof off a mobile home and downed trees and power lines.	Bartow County	01 0145EST 0 0 5 0 Lightning
Dade Co.	11 0200EST 0 0 2 - Thunderstorm wind		Lightning caused fires that destroyed a mobile home and heavily damaged a church and a business in Cartersville.
,	High wind blew the roof off a mobile home, and six other mobile homes suffered minor damage.	Clayton County	01 0200EST 0 0 4 0 Thunderstorm winds
Columbia Co.	12 1615EST 1.0 30 0 0 0 Tornado (FO)		Thunderstorm winds partially unroofed a motel along 1-75 in northern Clayton County. Debris from the roof fell on several parked cars.
• :	A tornado was sighted just southwest of Lake City. It caused damage to several trees.	Lowndes County	.01 1645EST 0 0 5 0 Thunderstorm winds
Osceola Co.	14 1600EST 0 4 3 - Thunderstorm wind		Thunderstorm winds estimated at 60 to 80 mph downed around 200 trees in Valdosta. Damage to a hospital alone was estimated at \$100,000. Power line damage was extensive in the area. 15 homes were damaged by falling trees.
	High wind blew over four recreational vehicles.	Wilkinson County	01 1730EST 0 0 ? 0 Thunderstorm winds
Levy Co.	25 1447EST 1.0 30 0 0 1 0 Tornado (FO) A tornado downed trees and power lines.		Power lines were downed and trees uprooted and blown across streets by thunderstorm winds in Irwinton,
Lee Co.	25 1755EST 6.0 50 0 1 6 - Tornado (F1)	Laurens County	01 1800- 0 0 5 0 Thunderstorm winds
	A tornado severly damaged three homes and damaged thirty other homes by blowing off the roofs or destroying screen enclosures. One person was injured. The tornado was in Cape Coral		1815EST  Hundreds of trees were uprooted and blown down in Dublin. Doors were blown off a fire station and the roof damaged. A wooden, customer drive-through at a bank collapsed onto a car.
Alachua Co.	26 1800EST 1 0 0 0 Lightning	Cook County	customer drive-through at a bank collapsed onto a car.  101 1815EST 0 0 ? 0 Thunderstorm winds
	A 44 year old man was killed by lightning while he loaded baggage onto an airplane at Gainesville		Thunderstorm winds downed trees and power lines just east of Adel.
Citrus Co.	Regional Airport.  26 1915EST 0 0 4 - Lightning	Echols County	01 1900EST 0 0 ? ? Thunderstorm winds
510103 001	Lightning started a fire which damaged a home.		Several pecan and sycamore trees were blown down 8 miles southwest of Statenville.
Palm Beach Co.	28 1015EST 1 0 0 0 Lightning	Screven County	01 1930EST 0 0 4 0 Thunderstorm winds
	A 26 year old man was killed by lightning while standing under a tree.		Thunderstorm winds damaged a house, a mobile home and several farm sheds 3 miles southwest of Sylvania in the Goloid community.
Broward Co.	28 1200EST 1.0 30 0 0 3 - Tornado (FO)	Wheeler County	01 1935EST 0 0 ? ? Hail (0.75)
	A tornado damaged three house roofs and screen enclosures and uprooted several trees in Lauderhill.	, ,	Hail 3/4 inch in diameter fell briefly in Alamo.
	cherosures and aproaced several chees in Eddoerning		
		L	

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	PLACE	NO. OF ESTIMATED PARAMETER - POCCAL PARAMETER - POC	PLACE	TITIES - LOCAL STRANDARD - LOCAL STRANDARD - LOCAL DATE - LOCAL DAMAGE - LOCAL DE STRANDARD -
:	GEORGIA		—— IDAHO	
Ĭ		01 1940EST 0 0 ? ? Thunderstorm winds,	Cassia County	24 1700MST 0.5 50 0 0 0 Tornado (FO)
		Hail (1.75)  Golf ball size hail fell briefly near Lumber City and thunderstorm	,	A tornado east of Malta near I-84 touched down briefly and caused no damage.
		winds uprooted a few trees in Lumber City.	Power County	24 1700MST 0.5 20 0 0 0 Tornado (F1)
	Jeff Davis County Appling County	01 2000EST		A tornado in the far western edge of the county touched down briefly and caused no damage.
		Trees were downed in scattered areas in these counties due to strong thunderstorm winds. Power lines were also downed in a few locations, some were knocked out by the falling trees. Damage appeared to be most numerous in Appling County. There were several reports of damage to roofs, equipment sheds, and a silo.	IDZ003 Bingham County	24 2230MST 0 0 0 4 Lightning Lightning set fire to haystacks between Rockford and Springfield, causing the destruction of about 400 tons of hay.
ŀ	Lowndes County	02 1530EST 0 0 4 0 Thunderstorm winds	IDZ007 Camas County	29 1200- 1.0 20 0 0 0 Tornado (FO)
. 1		Three mobile homes were heavily damaged and a storage shed was destroyed by thunderstorm winds 7 miles southeast of Valdosta.  Trees were also downed in the area and several homes had roof damage.	ID2008	A tornado was sighted by the public six miles east of Hill City.  No damage was reported.  29 1430-  0 0 6 5 Flash Flood
	Walton County	06 1320EST 0 0 ? 0 Thunderstorm winds	Lewis, Idaho, and Clearwater Counties;	1530PST Thunderstorm Wind A severe thunderstorm produced a 6 to 12 foot wall of water, mud,
-	10 miles	Thunderstorm winds downed trees east of Highway 11 south of Good Hope	Kamiah, Cottonwood and Greencreek areas	and rocks on Highway 62 which washed two vehicles off the road and closed the highway between mileposts 14 and 18. Many basements,
	Greene County	06 1400EST 0 0 ? O Thunderstorm winds		garages, and a few businesses were flooded in the area. Winds estimated at up to 70 mph and small hail ripped screens off houses, blew roofs and sides off of barns, and did extensive damage to
		Trees were uprooted and roofs damaged in Siloam by thunderstorm winds.		crops. Residents' rain gages recorded anywhere from 1.5 to 3.5 inches of rain in less than 30 minutes.
	Camden County	06 1600EST 0 0 4 0 Thunderstorm winds	IDZ003 Butte County	29 1600MST 0 0 4 5 Severe Thunderstorm,
		Several mobile homes were damaged and a wall blown out of a warehouse by thunderstorm winds in St. Marys.	'Arco and Butte City areas	Flash Flood, Hail (0.75-1.00)
	Henry County	07 1430EST 0 0 ? 0 Thunderstorm winds 0 0 ? 0 Lightning		Torrential rains and large hail flooded sections of Highways 20/26 and 33 with up to 18 inches of water. Traffic was disrupted for hours. An official Arco rain gage measured 1.53 inches of rain
,		Thunderstorm winds downed trees and power lines in the Locust Grove area. Seven fires were caused by lightning. One barn was destroyed.		and unofficial gages recorded up to 2.5 inches. Windrowed hay was washed down fields and piled beside fences along Highway 20/26.
	Greene County	11 1400EST 0 0 ? 0 Thunderstorm winds	IDZ004 Cassia County, Oakley	29 late 0. 0 4 0 Flash Flood afternoon
1	: :	Several trees were downed and a few roofs damaged by thunderstorm winds near Siloam.		Six inches of water flooded the streets in Oakley and power was out for over an hour.
	Floyd County	16 1815EST 0 0 ? O Thunderstorm winds	ID2008 Latah County,	29 1800- 0 0 3 0 Flash Flood 1900MST
		Thunderstorm winds downed trees and power lines near Cave Springs in the southern part of the county.	Moscow	Thunderstorm rains sent more than 2 feet of water through the streets of Moscow which lapped at doorways. Police closed a main
1	Cobb County North Fulton County Forsyth County Gwinnett County	16     1815EST     0     ?     0     Thunderstorm winds       16     1830EST     0     ?     0     Thunderstorm winds       16     1845EST     0     ?     0     Thunderstorm winds       16     1900EST     0     ?     0     Thunderstorm winds	IDZ004 Caribou and Bannock	intersection in downtown Moscow until the water receded.  29 evening 0 0 3 5 Flash Flood, Lightning, Hail
		Trees were downed at scatted locations from eastern Cobb County near Marietta to north of Lawrenceville in Gwinnett County. One tree fell on a car in Roswell. A few power lines were downed as	Counties	Lightning destroyed two computer printers and burned out telephones and three telephone master boards in Grace. Hail caused crop damage and water washed out the road between Treasureton and Downey.
	Hall County	well, some by falling trees.  16 1920EST 0 0 ? 0 Thunderstorm winds	TDZALI	
		Winds to 60mph occurred along Lake Lanier on the north side of Gainesville.	IDZALL Statewide	Nonthiong  Numerous dry lightning episodes started hundreds of forest and range fires which charred thousands of acres throughout the state
	Pulaski County	25 1545EST 0 0 ? 0 Thunderstorm winds		range fires which charred thousands or acres throughout the state during the month of August.
		Several trees were downed by thunderstorm winds across Highway 341 near Hawkinsville.	The section of the se	
	1.10	In-Court, S. L. WORK, MARKAGOVILLE		
-	10 10 4110		11 ILL INOIS	
	10 IDAHO Fremont County	09 1700MST0.5 10 0 0, 0 0 Tornado (FO)	Cook Co, South, west, and north suburban	26 1420- 0 0 3 0 Tstm.wind (45) 1500CST 50 mph thunderstorm winds toppled many trees and pulled down
	Plane Comm	A brief tornado west of Egin near Mine Mile Knoll caused no damage.		powerlines in many suburban Chicago locations, causing power outages to 12,000 residents.
	Elmore County	10 late 2.0 20 0 0 4 0 Tornado (F1) afternoon .  A tornado in the Pasadena Valley east of Glenns Ferry scattered hay from two hay stacks and demolished a 14 x 70 trailer.	De Kalb Co. Genoa	26 1500CST 1 0 0 Lightning Lightning struck and killed a grounds worker at the Ellwood Golf Course. Mi60
• • • •	IDZ004 Cassia County,	23 late 0 0 4 5 Hail (0.4), 7 afternoon Flash Flood,		
	Oakley and Bostetter	Lightning A thunderstorm produced hail 3 inches deep at Warm Springs south of Oakley, causing severe damage to grain and optato fields and gardens in the area. 2 inch deep hail was reported at Bostetter where flash flooding also occurred. Lightning hit the TV antenna at Ray Anderson's residence at Oakley, traveled down the antenna, and set bushes on fire. A TV and radio were blown out and damage		
	<u> </u>	was done to a phone and the house wiring. The bush fire set the eaves of the house on fire.		

		AUGUST 1980
PLACE	TIME - LOCAL STANDARD	PLACE  PLACE  PLACE  STANDARD  STANDARD  STANDARD  STANDARD  STANDARD  STANDARD  OCCUPA  NO. OP  DAWGE  CHARGCE  OCCUPA  STANDARD  OCCUPA  OCCUPA  STANDARD  OCCUPA  O
12 INDIANA		INDIANA
floyd Co, 3NW Clarksville	e7 1615 EST	Marion Co.  Castleton 26 1945 EST B 8 8 Tste. wind  At 48 feet above ground level, wind gusts to 68 and 68 aph were
Floyd Co, New Albany	87 1635 EST 8 8 2 8 Tste. wind Trees measuring 18 to 12 inches wide and standing 58 feet tall were downed by strong thunderstore winds.	aeasured by equipment on towers at Castleton and Tremont In northern Marion County.  Delaware Co: Eston, Albany 26 1958 EST 8 8 2 8 Tate. wind
North-Central Indiana	8988- 26 2000 EST 8 8 2 ? Lightning Three separate lines of thunderstorms moved through North-Central Indiana, causing at least three fires and numerous power outages.	About two dozen trees were uprooted.  Wells Co, 3E Bluffton 26 1955 EST 8 8 2 8 Tstm. wind  Trees were down and blocking the road 3 miles east of Bluffton.
Boone Co, Whitestawn	26 1240 EST 0 0 2 0 Tsts. wind An unusual report from a local residence described strong winds blowing open the back door and shattering a window, following which the refrigerator doors were blown open and its contents sucked out while a 38-pound beagle sitting on the couch was thrown out the front door. Also, trees were danaged nearby.	Wayne Co.  Richmond  26 2128 EST  8 1 3 8 Lightning  A young man was critically injured when the car he was driving was hit by a falling tree. Witnesses maid the tree had been struck by lightning.
Noble Co, Albion	26 1742 EST 0 0 2 8 Tatm. wind (52)  The sheriff's department reported 68 aph winds. Also, several trees were blown down across the northern part of the county.	13 <b>10WA</b>
Huntington Co, Huntington	26 1833 EST B B 2 0 Tate, wind (52) A spotter in Huntington reported 60 aph winds. Also, trees and power lines were downed in Bippus.	O'Brien County, Sheldon
Howard Co, Breentown	26 1848 EST & 8 2 8 Tstm. wind Strong thunderstorm winds downed trees near Greentown and New Landon.	O'Brien County, near Hartley   O1 1906 CST
Allen Co, INN Fort Wayne	26 1858 EST 8 8 2 B Tstm. wind (52) A spotter reported 68 nph winds just northwest of Fort Wayne. Also, saveral trees and telephone poles were downed by high winds in the eastern part of the county.	Howard County, Davis Corners Howard County, 10 S Cresco  Ol 1835 CST  Ol 0 3 5 Hail (0.5)  Small-but-persistent hail continued for about 10 minutes in a storm west through south of Cresco, damaging some corn and badly damaging the soybeans on local farms.
Wells Co: Ossian Northern Wells Co.	26 1857 EST B 8 4 8 Tsta, wind 26 1912 EST B B 2 8 Tsta, wind Saveral barns were blown down and a house was damaged near	Cass County, Vicinity 04 2115 CST 0 0 4 0 Lightning Several lightning strikes cut the electricity to many Cass County residents.  Jefferson County, 05 1700 CST .1 15 0 0 3 3 Cold Air Tornado (F Fairfield A number of witnesses observed a funnel emerge from overcast sky
Grant Co, Numerous locations	Ossian. At 1912 EST, several trees were reported across the road in northern Wells County.  26 1986 EST 8 8 3 8 Tstm. wind  The shariff reported trees and lines down across the county.	and touch down on a golf course, damaging trees, limbs and a flag pole.  Delaware County, 07 1745 CST 25 0 3 4 0 Tornado (F1)  N Ryan Jones County, Olin  07 1910 CST 0 0 4 3 Wind (58+ MPH) A small tornado knocked a motor home off the highway, demolishing the vehicle and causing minor injuries to the driver and two
Adams Co: SNN Decatur 6NE Decatur	26 1986 EST 5 8.1 8 2 6 5 Tornado (F2) 26 1915 EST 8 8 4 8 Tsta. wind  A tornado touched down in northwestern Adams County and damaged 28 homes, 12 extensively. Two people were hospitalized. Damage was estimated at 4 million dollars, of which 3 million was private damage and I million public damage. The tornado followed the path of the 8t. Mary's River for a short time, dropping about 588 trees in the river. The path began approximately 5 miles northwest of Decatur and ended 5 miles north of Decatur. Shortly after that, a trailer was destroyed by high winds 6 miles northeast of Decatur.	passengers. The storm also produced some fierce winds that brought large limbs down.  Pottawattamic County, Council Bluffs Carroll County, Carroll Shelby County, Harlan Audubon County, Eik Horn Decatur & southern Clarke Counties  13 Morning 13 0045 CST 0 0 4 0 Lightning 13 0500 CST 0 0 4 0 Lightning 13 0500 CST 0 0 4 0 Lightning 13 0500 CST 0 0 4 4 Flash Flood Lightning 13 Morning 13 Morning 0 0 4 4 Flash Flood Lightning strikes to power lines caused outages to a number of residences. Some heavy downpours (up to 6 inches) near Carroll flooded out the transmitter for the radio station, knocking it off the air. Heavy rains also brought flash floods to south-central Towe
Hamilton Co, INE Home Place Blackford Co, AN Hartford City	26 1925 EST 0 0 2 0 Tsta, wind Strong winds downed 3 trees. 26 1935 EST 0 0 4 0 Tsta, wind	Polk County, Des Moines Keokuk County, What Cheer What Cheer Mat Cheer  13 Alt Day  0 0 3 0 Urban Flooding 13 Afternoon 0 0 4 4 Flash Flood Steady rain overnight set the stage for the flooding on Coal Creek in What Cheer when heavier thunderstorms moved through. The daytime total of rainfall was about 6 inches. In Des Moines, 3 to 4 inches of rain almost washed out the opening of the State Fair.
Jay Co, Numerous locations	A barn was demaged and several silos were destroyed by high winds.  26 1945 EST 8 8 3 8 Tstm. wind	Davis County, 13 1900 CST 0 0 5 0 Lightning Drakesville Lightning started a fire that destroyed a house.
	The sheriff's department reported trees and lines down across the county.	

									2 .											NOGOD	1 1900
PLACE	-	DATE TIME - LOCAL	STANDARD	(MILES) WIDTH OF PATH.	KILLED GASSAGA	2		CHARACTER OF STORM		PLACE		DATE	TIME - LOCAL STANDARD .	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	KILLED		PROPERTY PWWD		CHARACT OF STORM	- 1
10V	VÁ					٠.				- KAN	SAS										
Marshall Cour 1.S Laurel Jasper County		14 1715 14 1732			0 0	4 .		nd (58+ MPH) nd: (58+ MPH)	Unfo	on Co, ontown ort Scott			1650CST 1700CST			0	0	4	5 T	STM Wind STM Wind(6) ail(.75)	lkt),
Marion County Painted Rock Jasper County Monroe Poweshiek Cou Brooklyn Poweshiek Cou	y, near	14 1737 14 1745 14 1810 14 1900	CST CST		0 0 0 0 0 0 0	5 0 4 4	0 Fu 0 Wi 4 Ur	rnado (F1) innel Clouds ind (58+ MPH) ban Flooding		ord Co, sburg		A pot Abile south Empor befor	1758CST ent seven ne and Fo east alon ia and To e enterin dropped	ort Ril ng the ola to ng Miss	ey ard Neosho Fort S	ound 14 River Scott a about 1	20CST Vall Ind Pf 800CS	and m ey thr ttsbur T. Th	oved ough g	STM Wind(5:	2kt)
Brooklyn		produced roof off trees and	ome flo home a one gar	oded base t Painted	ments in I Rock, ll felled by	Central Ic miles wes winds that	wa. A it of P it stru	downpours that tornado took the ella. Numerous ick at Brooklyn.		•		estim mile Damac	ated stro long and e was wi	onger t 30 m11 desorea	than 10 le wide ad and	10 mph path. severe	along . Cr	its l	50 re a		
Winnebago Cou Buffalo Cente Woodbury Cou	er	14 2050 Lightning other app 16 2314	blew ou Liances,	and crac	cked the p	ion boxes	, dama a few	ghtning ged some TVs and spots in a home. .nd (60 MPH)				total Elect in th	loss in ric spoke e 75 yea ny lost	severa esman d r histo	nlarea desribe ary of	is. A ed it a the co	Kansa s "Th ompany	s Gas e wors ." Th	and t.storn e		
Sioux City A		Some inte City area town due	nse thum causin to the s	derstorms g some po	s moved ac ower outag nds	ross from es and oth	Nebras er min	ka into the Sioux or damage in				Allen main were 100 p	Countie line from also topp oles in	s. Two m the w pled. the sto	120fi iolf Cr United	t high reek Ge I Elect lorst c	"H" p enerat tric l of the	oles f ing pl ost an damag	or a ant other	•	
Worth County, Northwood Des Moines Cou		26 0300 An intens trees in 26 0455	thunde he Wort	rstorm br h County	, 0 0 ought wind Seat. Min	or power	lied l outage	ind (70 MPH) arge limbs of s ensued. ightning	[.]	: :::		A cou	ntrated nty by co amage fo	ounty a	account				s of		
Burlington Jackson County	, .	A bolt of damage. 26 0640	lightni CST		d the roof	of a hou	se, ca 0 W	using \$10,000 ind (58+ MPH)			•	Sever damag	s: Tota al grain e path w	bins w hich re	ere to	from W	in th	e 25 m City t	11e .o	2	
Maquoketa		A huge li automobil	nb from	a tree fe hich it f	ell in thun	derstorm	winds	and damaged the				aspha at th was b north	ip. An 8 il Grove ilt was p ie Lake, ilown dow in of Coun	Reserved the and the n. Rocard Green Rocard	voir. up from e screen ofs we ove.	A 30 t m the m en at a re torm One man	by 4 f road a a Driv n from	oot pi cross e Inn 2 hom was c	ece of the dan Theaten es just aught	n .	
14 KANSA Smith Co, 10NE Smith Lebanon Jewell Co,		01 1100 01 1115			0 0			STM Wind(52kt) ightning				Lots Ameri east acros trail	Total of roof cus. Tw of Empor s Inters ers were of Empor	and will o mobility ia; del tate H	ndow d le hom bris f ighway	amage were rom the 35.	was do e dest e home Two tr	ne nea royed s was actor-	r 7 mile: blown	5	•
105W Mankat	:o	toward. Ma	thundernkato. dings, a Lebanor	Strong w and light	0 0 noved from inds damag ning burne	ed crops.	ter and to the	STM Wind(52kt)				Sever busing and 3 30 ho damage the g	ey: Tota re damage nesses in 88 mobile ouses and ped. Mil ground be	was de Burlli homes 20 mol o and.s	one to ngton were bile h soybea Burlin	many I and Lendestrom omes with n field gton and	homes roy. yed, a ere ex ds wer nd Ler	and Three and and tensive re mower	houses other vely ed to		
Dickinson Co	:		storm o		nd gust wa							requ <sup>*</sup>	ie were i ired hosp son: To storm cau	italiz tal da	ation. mage e	stimat	ed at	\$0.5 N			
Enterprise Geary Co, Fort Riley Morris Co,		01 1425 01 1433			0 0	3		STM Wind(61kt)				Cons	derable	damage	was d	one to	farm	bu11d1	ings an	d	
White City Parkerville		01 1445 01 1450			0 0	5 4	4 TS	STM Wind, ail(1.50) STM Wind, ail(1.00)		i		crops	n hit the	north	east c	orner	and wi	lped ou	it most		
Dwight Council Gro Council Gro Dunlap		01 1452 01 1457 01 1500 01 1515	CST CST		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5 5 4	4 TS 4 TS	STM Wind(52kt) STM Wind(71kt), ail(.75) STM Wind(52kt) ail(1.75)				Most 20 m corne was 8	homes and le wide ers of the clown from the characters are all the c	path f path f ne coun om a st	dings rom th ty suf adium,	in Iole e nort fered the s	a and hwest damage teeple	through to so The torn	phout a otheast oroof from a		
Lyon Co. Near Americ 7E Emporia	us	01 1530	CST		0 0	5	5 TS Ha 4 TS	STM Wind(61kt), ail(1.75) STM Wind,		• • • •	-	and 3 Seven	3 mobile ral mobil nomes and wind know	homes to e home: i build cked 16	were d s were ings w cars	estroy destr ere da of a f	ed, all oyed a maged	l in Id at La i in Gas	ola. Harpe.	•	
Neosho Rapt	ds	01 1550 01 1600			0 0	5 · .7	5 TS	ofl (1.00) STM Wind(78kt), ofl(1.50) STM Wind(78kt),		:		1ts Bour	tracks so bon: Dan m hit the	outh of mage es e south	Morar Stimate Seast !	o. ed at 1 half of	1 M11 f the	lion. county	.The		
Burlington Leroy Anderson Co,		01 1615			0 18	7	7 T:	ail(3.50) STM Wind(87kt), ail(3.50)		• • •		bale blow	ged a gro s were b n from a	lown th mobile	rough home	fences in Uni	. Th iontow	e roof	was		
Garnett		01 1625 01 163			0 0	4· 5	4 T	STM Wind(52kt), ail(.75) STM Wind(61kt),				wors	storm unt to hit 1 extent	Kansas							
Woodson Co. Piqua		01 163	CȘT		0 0	. <b>5</b>	5 T	ail(.75) STM Wind(87kt), ail(.75)	-			•		. •.		*			-		
Iola Gas La Harpe Moran		01 163 01 163 01 164 01 164	CST CST		0 0 0 0 0 0 0 0	7 5 5 6	5 T 5 T 6 T	STM Wind, aij(1.00) STM Wind STM Wind STM Wind,			٠.										
	· ·	·	·	<u> </u>			н	af1(1.00)	<u> </u>												J

Revert Co.   Col.   1715- 7   250 0 3 4 3   Tornado(F1)   Dear Coty   Dear C	CHARACTER OF STORM
Kines Dr.	
Comparison	٠.
Second City	
Bally Graph	TSTM Wind(55kt),
3   San City   0   1800ST	Haff(1.00) TSTM Wind(55kt), Haff(1.00)
produced camping which as it moved free Kineley to the Octobes better ears Kineley to the Octobes better ears Kineley to the Octobes better ears Kineley and the better of Services of Ser	TSTM Wind(60kt), Hail(.75)
Truttle Creek Lake   Content of Part   Content	Ha(1(1.00)
Haskell Co,   Sublate	Ha11(,75)
Sublotte   0	Haf1(1,50)
Make Co	Haf1(2.00)
78   Mage Co.   1.64765T   0 0 2 0 TSTM Wind(52kt)   Ford Co.   She Highton   1.71065T   0 0 2 0 TSTM Wind(52kt)   Fail(1.75)   Ford Co.   1.72065T   0 0 2 0 TSTM Wind(52kt)   Ford Co.   1.72065T   0 0 3 4 H   1.72065T   0 0 2 0 TSTM Wind(52kt)   Ford Co.   1.72065T   0 0 3 4 H   1.72065T   0 0 0 3 TSTM Wind(52kt)   1.72065T   0 0 0 3 TSTM	
A-nearly solid line of thunderstorms from Ulysses  A haarly solid line of thunderstorms from Ulysses  to Meade drifted south and dissipated north of Liberal, Large hall and winds estimated at 60 mph accompanied the storms. Little structural damage was cone, but crops suffered damage, especially in Haskell County.  Linn Co, Mound City  O1 253aCST	Hail(1.00) Hail(.75)
Lin Co	Ha11(1.50)
125M St. Francis   SS Bird City   SS Bird City   Sherman Co, SN & 3M Goodland   SN & 2M	Lightning,
SN & SM Goodland   9N & 2M & 2M & 2M Goodland   9N & 2M & 2	Haf1(.75)
Thunderstorms moved out of northeast Colorado and produced winds estimated 60mph and stronger in extreme northwest Kansas.	Ha11(.75)
35 Beloft	Ha11(.75) Ha11(1.75)
Tipton Osborne Co,	
5.55 Athol	Haf1(.75)
35 Belleville	STM Wind
Norway . 04 2030CST 0 0 3 3 TSTM MInd, Goodland Airport 08 1702CST 0 0 2 2 TS Hail(.75) 65 Edson 08 1730CST 0 0 3 3 TS	Hail(.75) FSTM Wind(59kt)
	FSTM Wind(50kt) FSTM Wind(70kt)
Jewell Co, Cheyenne and Sherman Counties. A wind gust was Randall 04 1825CST 0 0 3 3 Hail(.75) measured at 58mph at the Goodland Airport and income Co. another at 68mph at the St. Francis Airport.	
Barnard	;
2N Jamestown   04 2035CST   0 0 3 3 Hail(.75)     55E Concordia   09 1400CST   0 0 0 0 Fu   Washington Co,   A funnel cloud was sighted southeast of Concordia.	
A series of severe thunderstorms moved east across Near Dwight 09 1615CST 0 0 0 0 Fu	unnel unnel unnel

	PLACE	STANDARD  STANDARD  CENGTH OF PATH  WIDTHED  WILLED  WOODE STIWATED  WILLED  WILLED  OPERSONS  CHANGE  CHANGE  OPERSONS  CHANGE  OPERSONS  CHANGE  CHA	PLACE	TIME - LOCAL  LENGTH OF PATH  WIDTH OF PATH  OP STANDARD  CHAROS OF STIMATED,  DESTIMATED,  DESTIMATED,  OF STANDARD  CHAROS STORM  STORM  CHAROS STORM
. L	- VANCAC		L KANSAS	
	Lyon Co, Near Allen	09 1826CST 0 0 0 Funnel	Clay Co, Near Longford	18 2055CST 0 0 3 3 Ha11(.75)
-	Thomas Co. 5N Rexford Decatur Co.	A funnel was sighted near Allen.  12 1807CST 0 0 0 3 Hail(1.00)	Ottawa Co, Bennington 4N Minneapolis Minneapolis Bennington	18 2100CST 0 0 3 3 TSTM Wind(61kt) 18 2109CST 0 0 4 4 Ha11(1.75) 18 2109CST 0 0 3 3 Ha11(.75) 18 2109CST 0 0 3 3 Ha11(.75)
	15SW Oberlin	12 1822CST 0 0 0 4 TSTM Wind(52kt), A thunderstorm developed northeast of Colby and moved toward Oberlin. It produced winds estimated	Saline Čo, Salina Gypsum Dickinson Co,	18 2130CST 0 0 5 0 TSTM Wind, Ha11(.75) 18 2157CST 0 0 3 3 Ha11(.75)
	Nemaha Co, Sabetha	at 60mph and inch hail resulting in some crop damage.	3E Solomon  Hope Marion Co.	18     2144CST     0     0     4     4     TSTM Wind(52kt), Hall(.75)       18     2213CST     0     0     3     3     TSTM Wind(52kt)
	Sabetha Brown Co Fairview	12 2210CST 0 0 6 4 Ha11(2.75)  12 2215CST 0 0 4 4 Ha11(2.00)  Golfball to baseball size hall pelted the area	H111sboro	18 2240CST 0 0 2 2 Hail(.75) A series of severe thunderstorms moved south across North-Central and Central Kansas. The storms dropped large hail and produced strong
		from Sabetha to Fairview. It fell for about 15 minutes in Sabetha. Nearly every roof in town was damaged, and hundreds of windows were broken. A good deal of crop damage was also done.		winds that damaged farm buildings and downed power lines. Trees were uprocted at Salina and east of Solomon. Power lines were knocked down in Salina, and the hall broke many windows across the area.
	Graham Co, Hill City Arpt	13 1645CST 0 0 2 0 TSTM Wind(50kt) A thunderstorm wind gust was measured at 58mph at the Hill City Airport. Little damage resulted.	Cloud Co, Concordia Airport Concordia Ottawa Co,	19 0018CST
	Lane Co, 7SE Dighton	13 1645CST 1 30 0 0 3 0 Tornado(F0) A tornado touched down briefly southeast of Dighton. Three power poles were downed, but little other damage resulted.	Delphos	A severe thunderstorm developed just north of Concordia and moved south toward Salina. It dropped tennis ball size hall over much of Concordia and caused, a great deal of damage to roofs and vehicles.
	Geary Co. Fort Riley Airport Riley Co. Manhattan Airport Manhattan	13 1701CST 0 0 0 0 TSTM Wind(51kt) 13 1733CST 0 0 3 0 TSTM Wind(70kt) 13 1745CST 0 0 3 0 TSTM Wind	Smith Co, Smith Center Smith Center	20 1513CST 0 0 3 3 Ha11(1.50) 20 1524CST 0 0 3 3 Ha11(1.25)
	rama cca.	A thunderstorm developed near Junction City and produced strong winds as it moved east through Manhattan. Wind gusts were measured at 59mph at Fort Riley's Marshall Field and at 81mph at the	5N Portis Osborne Co, Portis 5NE Osborne	20 1610CST
	Jackson Co,	Manhattan Airport. Trees were damaged and power lines downed in Manhattan.  13 1730CST 0 2 0 0 Lightning	Jewell Co, 10NW Esbon Esbon Mitchell Co, Cawker City	20 1630CST
	Holton	13 1730CST 0 2 0 0 Lightning A man and woman were injured when lightning struck a tree in Molton. Both were standing beneath the tree. The man was admitted to the hospital, and the woman was treated and released.	Trego Co.	A line of severe thunderstorms dropped large hail and produced isolated wind gusts of around 60 mph as they moved east across North-Central Kansas.
	Russell Co, 15SE Russell	13 1855CST 0 0 3 0 TSTM Wind : Thunderstorm wind gusts damaged several farm buildings southeast of Russell.	Wakeéney	20 1600CST 0 0 4 0 TSTM Wind Thunderstorm winds tore apart a shed and damaged a nearby mobile home on the south side of Wakeeney. The winds also turned over a truck on Interstate 70 south of town and blew over a roadsign.
	3NNE Dodge City Dodge City	13 2014CST 0 0 5 0 TSTM Wind 13 2030CST 0 0 4 0 Flash Flood Thunderstorm winds destroyed a mobile home, damaged two other residences and tore the roof off a business 3 miles north and 1 mile east of	Russell Co, lE Russell	20 1630CST 0 0 2 0 Lightning Lightning struck a car on Interstate 70 highway. The bolt burned the radio antenna from the car and blew out a front tire, but the driver was not
		Dodge City. The storm also dropped more than 3 inches of rain in less than an-hour. Many streets, low spots and basements in Dodge City were flooded.	Mitchell Co. 8SW Glen Elder	injured.  22 1610CST 0 0 3 3 TSTM Wind(52kt)
	Grant Co, 8NW Ulysses	-14 1415CST 0 0 2 3 Hail(1.75) Hail the size of golfballs fell northwest of Ulysses. Some crop damage resulted.	Osborne Co, 2E Osborne Russell Co, 4N Gorham 8W Russell	22: 1652CST
	Dickinson Co, 55 Abilene	17 - 1840CST O. 0. 3 3 Hail(1.00) Inch diameter hailstones fell south of Abilene. Minor damage resulted.		A line of severe thunderstorms produced strong winds and large hail from west of Beloft to Russell. The storms spawned a small tornado that touched ground for a short time north of Gorham.
·	Saline Co, Salina Salina Smolan	17 1912CST 0 0 3 3 Ha11(.75) 17 192CCST 0 0 3 3 Ha11(1.75) 17 1935CST 0 0 3 3 Ha11(1.75) A severe thunderstorm dropped 3/4 inch to golfball size hall across Saline County from Salina to	Ellis Co, Walker	22 1810CST 0 0 0 Funnel A highway patrol trooper sighted a funnel cloud east of Mays near Walker.
	Washington Co, Mahaska	18 1906CST 0 0 4 4 Hall(1,75)		SPECIAL HAIL SUMMARY  Kansas-Oklahoma Hail Coss Service reports indicate
	Republic Co, Belleville Cuba Talmo Narka	18 1927CST		hail was especially damaging to crops in the listed counties on the following dates:  Ol Gray, Haskell, Kfowa
-	15SE Belleville Cloud Co. 5NE Concordia 2N Concordia	18 2006CST 0 0 3 3 Ha11(.75)  18 2001CST 0 0 3 3 Ha11(.75)  18 2023CST 0 0 3 3 Ha11(.75)		04 - Jawell Républic 05 Thomas Washington 06 Decatur 07 Edwards 12 Brown, Nemaha
	Concordia 1E Glasco	18 2028CST 0 0 4 0 Ha11(1.50) 18 2034CST 0 0 3 3 Ha11(.75)		18 Republic

-		CAL	PATH	E	NO PER	OF SONS		MATED!	* * * * * * * * * * * * * * * * * * *		ŀ	CAL	осат. Ратн		NO. OF PERSON				
PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF P	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF F	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM
15 KENTUCKY		•			- <del></del>					16 LOUISIANA									
Southern Graves	07	1422CST			0	0	3	0	Thunderstorm Wind	St. Tammany Parish	01	1800CST			0	0	?		SVR TSTM-Hail (1.00)
County	and caus	s were blo 303 near ( ing consid ding propo	Cuba. derable	A shed	was h	lown	into	a house			The Lake Serv the	thunderste Pontchari ice anemon Orleans Le	orm con train. meter d evee Bo	ntinued It prod on the U oard rep	to mo uced .S. 1 orted	ve so at 47 1 bri that	uth al knot dge at stron	Weathe ong th gust a 1830C g wind	r Service employee e east portion of t the Weather ST. By 1837CST, s put several
Wayne County	Larg Road toba roof	e hail of near Mon cco crop : s were bla antennae	ticello in that own off	, destr area. of a	oying Tree	most es wer	all o e dam	Grove f the aged,	Thunderstorm Wind, Hail	St. Helena Parish Tangipahoa Parish East Baton Rouge Parish Livingston Parish	02 02 02	1108CST 1130CST 1153CST 1200CST	ress a	long the	0 0 0 0	0 0 0 0	? ? ? ?	? ? ?	ke. SVR TSTM-Wind SVR TSTM-Wind TSTM-Lightning SVR TSTM-Wind
Ĺaurel County		1300EST			0	0	6	0	Lightning .		A 11	ne of num	erous :	severe t	hunde	rstor	ns dev	eloped	along the LA/MS , Tangipahoa and
East Lincoln County	dest US 2 doll	tning tous royed the 5 South. ars. 1830EST	Londor	Churc	h Furi	siture	Plan	t on illion	Thunderstorm Wind,	·	Livi down of G 1108 powe	ngston Par numerous reensberg -1140CST. r lines b t 1130CST	rishes trees and no Also, etween Stro	between and pow orth of the sto Robert no winds	1100 er li Pine mms k and F	nes r Grove Inocke Inocke Inocke	OCST. S northea in St ed down natoula natoula	traigh st of . Hele numer in Ta ,50 ye	t-line winds blew Easleyville, west na Parish between ous trees and ngipahoa Parish at ar old pecan tree
	Tree hous and toba	s were up etops in ( did consi cco crops	Crab Or derable	chard.	Hai: e to	l dama the co	iged r	m from coofs id loss.	Hail		larg 1153 movi Lake were	e tree cr CST; 7 per ng thunde Pontchar	ashing cole we rstorm train a by a S	into a ere inju capsize around 1 t. John	bus a red. d a s 3000s	ind a Gale iailbo	small force sat in se thre	car in winds the so e crew	tning sent a Baton Rouge at from a south- uthwest part of men and the boat uty and two
Garrard County	Torr	1900EST ential ra	insthal	averas	4 ged bei	tween	6 and	1 12	Flash Flooding, Hail (1.75)	Lafourche.Parish	02	1320CST			. 0	0	?	0	SVR TSTM-Wind SVR TSTM-Wind
	out in t of G	es swelle tobacco a he Fall'L arrard Co	nd corr ick, Dr unty.	crops akes C Hail,	along reek, golfba	g with and F all si	l fenc latwo	e rows ods are ore	:28	Terrebonne Parish	Stra	lers in t	he Sch	iever/Th	riboda	aux ai	rea and	orn da	maged some ome roof damage
	the	es off of ears off trees fe	of the	cornst	alks.	A to	tal o	f sixt	-	Tangipahoa Parish		ome in th	e Luck	por cy nac	0		?	?	TSTM-Lightning
Western Rockcastle County	19	2200EST			0	0	4	4	Thunderstorm Wind,			tning kil farm nea			cows	and	seriou	ısly ir	jured two others
·	Rock Hail near Brock	ere thunde ccastle Co l of unkno Brodhead lhead were ain that	unty down siz	owning e flatt ee smal d out b	trees ened 1 woo y the	and the to den by heavy	power obacco ridges y down	lines. crop near		St. John the Baptist Parish	St.	John the	**300 Baptis of som	t Civil	0 Defer and o	0 nse sa damaga	? aid a s ed some	mall t trees	Tornado (FO) ornado took off in Laplace.
Powell County	Hail Cree	2300EST (estimated severel ek. Stron actural da oof was bl	y dama g thund mage i	ged the derstor n the F	0 toba ms ca orge:	O cco cr used a M111 I	3 rop ne a bit Road a	4 ear Har of irea -		Jefferson Parish	Ligh Rive part	r at Wagg of Kenne ecaution.	aman. r wher Two d	Winds bl e city a ozen peo	fire lew thou	ne fin ritie: rere i	re's sm s evacu treated	ancho oke in ated 1 at ar	TSTM-Lightning ired in the MS ito the south 500 people as ea hospitals for ee hospitalized.
Warren County	26	1500CST			0	3	0	0	Lightning	East Baton Rouge Parish	ì	1435CST			0	0	?		SVR TSTM-Wind
	Stru Rich ages boy	e people ick them i nardsville 36, 34, had to be r men wer	n a bar . The and 16 put i	rn whil victim years n inten	e han s wer old. sive	ging t e thre The l care w	tobace ee mal L6 yes while	o in les, er old the			secu unde blew down	red upper r constru down som itown area	porti ction e smal	on of a	stee town !	l fran Baton	ne offi Rouge.	ce bui In ac car wi	ding that was dition, the winds ndows in the
Barren County		1630EST			0	0	4	0	Thunderstorm Wind	Lincoln Parish	1	· 1930CST itning cau	sed a	fire wh	0 ich d	0 id \$1	5 05,000		TSTM-Lightning to a home in
	Class to h Elec down glass Mark	ere thunde gow areas somes and trical, t by the w s window set and a City and	causi downing elephon inds and was bre nearby	ng subs ng tree ne and nd fall oken ou shed w	tanti s and cable ing t t of as de	al roo power lines rees. the Co stroye	of dam r line s were A la  ountry ed bet	mage es. torn arge pla Corne	nte	17 MAINE	Rust	on.		ŕ					
Cumberland County	26	1805EST		٠.	0	0	3.	0	Thunderstorm Wind	York County	07	1415EST	1.5	200	0	0	*6	С	Tornado (F1)
	pow	Burkesvil ages in Bu er lines d es blocked	irkesvi lown in	lle wit	haf Ity.	ew la	rge ti	rees an	d d		Par abo	e on the v sonsfield, ut four to then enter	vest si Maine enths o ed the	ide of P where of a mil Maine	rovin Route e fro woods	ce La 153 m the , tra	ke. I bends east versed	t twis to mee shore a sec	eld-Effingham town ted its way into t the state line of Province Lake. tion of Smith
Monroe County	Sevi the A fi a si Scho bloo diam	1400-1430  CST  ere thunde small comurniture supermarket ool was ur www out. Functor, beat trees alc	erstorm munity store w and a nroofed lail, f at leav	of Gam as unro barn. along rom 1 t es off h doing	aliel ofed The with to 1 3 of the g subs	in Mand de Gamal window 1/4 in tob. tanti.	onroe eposi iel M ws be ches acco al dan	County ted ont iddle ing in crop mage to			Roamendo yard tot. the in dama approximately and tion	d, tore the d near the	rough ne top imum wi . The its pa cyclo ral hom suffer lown aw ited \$5 farm's	the Smi of the idth alo path in ath were onic pat mes and the wor way, a p 5,000 wo garage	th fa hill, ng'th Main eith tern. crush st da art o and	rm, c The e Smi e was er up On ed tw mage f the f cor roof,	rossed path th Road nearl rooted Smith I o vehic where farmh n in f	Stage: was apply a more snown or snown cles. a six-louse relieds it is a six-louse relied to the sounce of the sounce relied six a six-louse relied six a six	coach Road and oroximately 200 planost 3 miles in iles in grapped off and laid the felled trees The Smith farm bay garage was pof was torn away, was lost. Sec. a battered canoe,
·	and mos	s and hous television t concentr wide pat Gamaliel.	se sidi on ante rated a	ng. La nnae we rea of	rge tere bl	rees, own d dama	pow own. ge wa	er line The s in a	s		Ser		nnel a	and Mrs.	Smit				National Weather , left no doubt

PLACE	PATE  STIME - LOCAL  CHARDS - LOCAL  MILLED  WOOD PATH  WOOD PATH  WOOD STIME - COCAL  STIME - COCAL  CHARDS - COCAL	PATE  TIME - LOCAL  STANDARD  STANDARD  STANDARD  CHARGES)  WILLED  WILLED  WILLED  WILLED  WOOD PATH  (TAROS)  WILLED  WILLED  WOOD PATH  (TAROS)  WILLED  CHARACTER  OF  STORM  STORM  OF  STORM OF  STORM  OF  STORM  OF  STORM OF  STORM  OF  STORM OF  STORM OF  STORM OF  STORM OF  STOR
MAINE		MARYLAND and D.C.
York County	07 1620EST 1.5 200 0 0 %5 C Tornado (F1)  A tornado touched down in Shapleigh where Knox and Coley Trafton Roads meet at Box Brook, crossed Butler Corner Road and just about reached Mason Road before lifting. Its path was approximately 200 yards at maximum width and about 1% miles in length. Most damage was confined to woods where trees were uprouted or snapped off and laid in a definite cyclonic pattern. A Knox Road barn had	Worcester County    05 1500EST   3 2 0 0 Lightning Lightning struck persons seated under a beach umbrella.   17, 2000EST   0 0 4 0 Hurricane   50 mph winds from Eurricane CHARLEY, gusting to 80 mph, caused minor external building damage and beach erosion.
	an entire side of its roof ripped away. A Butler Corner Road home also suffered roof damage from the winds, but was miraculously missed by several felled nearby trees. Inspection by two National Weather Service personnel and the description by a Butler Corner resident left no doubt that this was a tornado.	Allegheny County  25 1700EST 1 0 2 0 Lightning A lightning bolt ignited a bedroom fire and killed a man.  Statewide Spring 0 0 0 8 Drought
Oxford County	08 1520EST 0 0 5 Severe Thunder- storm In the Waterford-West Paris area, winds during a severe thunder- storm blew down and uprooted huge trees. West Paris was hardest hit along Greenwood Street to High Street. Four sections of aluminum roof were torn off the Penley Corp. and a large tree dropped on the roof of a nearby Greenwood Street home. Several fruit trees and large pine trees were toppled along High Street A pine damaged the roof of a High Street home. West Paris	Twenty-one counties were declared disaster areas because of droughts and the second of
Kennebec County	recorded 3/4 of an inch of rain in a half hour and pea size hail. There were isolated power outages that lasted about an hour.  08 1545EST 0 0 3 Severe Thunder- storm	Hampshire County, Ware  A woman was killed and a man injured by a bolt of lightning as they stood under a large pine tree holding an umbrella during a
Cumberland County	Readfield reported 60 mph (52 Kt) gusts during a severe thunder- storm.  08 1625EST 0 0 4 Severe Thunder- storm  Harrison reported winds blew down trees during a severe thunder- storm.	thunderstorm near the shore of the Quabbin Reservoir. P370  Worcester County, Uxbridge  A construction worker was killed by a bolt of lightning while we ing within a house. The lightning apparently struck a tree nea the house and then travelled into the house via a window sill an
York County	08 1640EST 0 0 4 Severe Thunder- storm The Hollis-Buxton area reported winds blew down trees during a severe thunderstorm.	then tore a hole in the cellar floor, hitting the worker in the head. The path of the lightning may have been through metal braces in the cellar and then up through the cellar celling.  M22P  Middlesex County, 07 1410EST- 4.0 50- 0 0 5 0 Tornado (F1)
Aroostaok County	09 Early AM  0 0 5 Heavy Rain  Residents of the Houlton area had upwards of 5 inches of rain fall during the early morning hours of Saturday. This produced varying amounts of damage to local roads and considerable damage to a number of basements, to both residential and business establishments. There was considerable soil erosion on Route 2A along the Medunekeag River. The major problem in Houlton was the collapse of four of its older storm drains. The Houlton Public Works reported a number of streets need repairs to shoulders of roads and or to driveways.	Bedford  A tornado touched down on the eastern end of the civilian airfie at Hanscom Field, flitpping over three single engine aircraft. The tornado them moved along an intermittent path in a generally mor northeasterly direction, cutting through a residential area of south Bedford. Hany trees were broken and uprooted along its path and gutters and stingles were torn off of houses. Mindows were blown out along Wiggins Avenue and several businesses suffered property damage - one had its roof torn up. A piece of metal was wrapped around a guard rail. Transformers exploded, contributing to power losses in the area. The path of the tornado terminated at the intersection of flowthe 62 and Route 3, Damage to
Cumberland County  York County  York County	199   1330EST	Bructures was estimated between \$50,000 and \$100,000, while the damage to the aircraft was about \$55,000.  Northern Bristol and 07 Late afternoon 0 0 ? ? Heavy rain and Flooding counties  Heavy thunderstorms brought cloudburst rainfall to the area with upwards of 4 to 4.5 inches of rain falling in a short period of around an hour to an hour and a half. Severe street and urban flooding was reported.
Somerset County	Old Orchard Beach reported winds blew down trees during a severe thunderstorm.  O9 1540EST	Worcester County, 08 1025EST- 1.0 100 0 0 3 0 Tornado (F1) 1030EST.  A tornado crossed the RI-HA border and travelled a short distance in a northeasterly direction over the extreme south portion of the
Washington County	storm.  16 1700EST 0 0 4 Lightning  In Calais, the roof of an Episcopal rectory was struck by lightning.	town. Trees were uprooted, but apparently only minor property dan age occurred. Many power lines were downed.  Norfolk, Suffolk, Middlesex and Essex count is supported by the support of
	causing—at least \$6,000 worth of fire damage. The rectory also sustained smoke and water damage. Another bolt struck a power line, came through a wall outlet, and set a sofa on fire at a Swan Street home. Calais radio station MQDY had both the AM and FM transmitter struck by lightning, with both suffering minor damage. Electrical wires burned by lightning caused minor power outages in Princeton, Waite and Calais.	A severe thunderstorm moved in an east-northeasterly direction a a line from the Needham-Dedham area, through Brookline, Cambridge, part of Boston, Charlestown, Revere, and Nahart. Some trees were uprooted, others broken, causing property danage and et tric power outages, on the Harvard Bridge between Boston and Cambridge, a construction company trailer was overturned by the winds gusting to 60 to 70 MPH. Three workers were injured. A roof was lifted off a building in Sullivan Smare and windows was blown out of another building. In Revere, a ferris wheel was tog pled at a carmival. The other smusements suffered danage which
18 MARYLAND Howard County	and D.C.    02 1500EST	was estimated at about 3500,000. A girl was injured at Nahant Beach when a parking lot attendant's booth tipped over on her in the gusty winds. Two other persons were also injured in the incident. Many boats were capsized in the immediate coatal area.
Anne Arundle County	Thunderstorm winds blew down a wall of a store.  02 1600EST 0 0 3 0 Thunderstorm Wind Thunderstorm winds uprooted trees and damaged cars and a barn.	

•			AUGUST 1986
	NO. OF ESTIMATED DAMAGE		NO. OF ESTIMATED! PERSONS DAMAGE
PLACE	CHARACTER OF OF STORM	PLACE	OF DARKE ISO OF THE STANDARD STORM
	TIME STAN C (4 WIDTH VITH (1 KILLÉI INJURICE CROPS		TIME STAIN WIDTH W
MASSAC	HUSETTS	- MICHIGA	AN
Berkshire County, South Egremont	17 Afternoon- 0 0 5 ? Flash floods evening	Presque Tale County, Ragers City	
	Cloudbursts of rain caused extensive damage in South Egremont. A		The funnel was seen to move southeast across a residental neighborhood, turn slightly to the left, and continue over Lake Huron. A shed was destroyed, shingles and roofing were
	mudslide on Route 41 caused severe damage to the road. Several houses were damaged by the mudslide, Nearby, a culrert was com- lately washed out and an auto washed into the ditch. Karner Brook became a roaring river when up to 8 inches of rainfall during the		pulled from a house, and a large tree was uprooted. The funnel aloft was seen over Grand Lake, 17 giles to the southeast a few minutes later.
	afternoon caused Smiley's Pond to overflow. At least five roads were closed to traffic and dozens of cellars were flooded. Damage	NE Lenamee and	15 1528EST 9 8 2 ? Wind
	to homes and criveways was estimated at 3150,000 while about the same amount of damage was reported for town roadways. In the north- ern portion of the county, Williamstown also reported flooding	S Wayne Counties	Winds esticated 60 to 65 mph hurled a car 40 feet, downed large trees, and flattened crops.
	of roads and basements after several inches of rain fell in about an hour. A bridge was reported to be washed out and several roads were closed.	Monroe County, South Rockwood	17 1330EST 0 2 0 Lightning 2 persons were struck on a golf course. The woman, wearing
Plymouth County, Hull	18 0530EST		metal spiked shoes, was critically injured; the man, with rubber shoes, was slightly injured.
	Heavy rain with amounts of about 4 to 4.5 inches fell in an hour to two hours which resulted in heavy street flooding along with	Genesse County, Flint	26 1228EST 8 8 Thunderstorm A gust to 56 mph occurred at the airport
	flooding of basements. The rain was accompanied by thunderstorm activity.		26 1238EST 9 9 3 Thunderstore
Nantucket County, Nantucket	18- Evening 0 0 5 0 Tropical Storm 19 Early morning CHARLEY	Lenamee and Monroe Counties	Wind and lightning caused widespread, mostly ainor damage, especially to power lines.
	Tropical Storm CHARLEY brought 65 M.P.H. winds, a four foot tide surge, and five foot waves to Nantucket Harbor. The most serious	Wayne County, Near Willis	26 1300ES) 0 1 0 Lightning
	damage occurred to boats in the harbor. Ten large boats were beached, and others damaged by boats which broke their moorings, Some boats were washed up on porches of homes at the water's edge,	Van Buren County:	A woman driving a van was slightly injured.  26 1625EST 8 8 8 Funnel Cloud
	Damage to boats was estimated up to \$75,000. On the island, a number of trees were knocked over by the winds and scattered power	SE of Pam Pam	The funnel cloud was seen to move northeast.
Statewide	failures were reported.  24 All day 0 0 4 0 High winds	Barry County, 5 miles N of Delton	26 1648EST 8.6 15 8 8 4 Tornado (P2)
	Strong winds gusting to 40 to 55 MPH were reported from sections of the state ranging from the Berkshires to Bristol County.		Trees were blown down at the beginning of the track, Along the north shore of Guernsey Lake, near the end of the track; a house was unreofed and partly destroyed. Both explosive forces and rotation were observed.
	Some trees and many braches were blown down by the winds, which resulted in scattered power outages. Along the coast, a number of small craft were overturned, but without any serious injuries.	Kalamazoo County,	26 1640EST 0.5 12 <b>0 0</b> 5 Tornado (F1)
,	, ,	2 miles NW Parchment	3 witnesses saw the funnel, I drove a car through it at high speed. Car was caked with mud and scratched by
			swirling branches. Several trees were uproated, and edding was pulled from a house. The funnel was on the south edge of a heavy rain shower. It appeared to bounce along, often not quite in contact with the ground, as
20 MICHIGAN		,	it moved southeast.
Allegan and Ottawa Counties,		Eaton and Ingham Counties, Disondals to 4 miles	26 1730EST 10.6 50 0 0 5 Tornado (F2)
Lake Michigan shore from Grand Haven to South Haven	82 8918EST 8 8 8 Funnel Clouds Many witnesses saw two funnel clouds goving east. They were	east of Holt	Mintesses saw a ropelike funnel skipping along the ground, Minor damage occurred to 6 houses, major damage to 2
Kent County,	visible for about 20 minutes.		abbile homes. 2 small aircarft were destroyed. Many trees were down. The funnel aloft was spen several times along the extension of the path 18 miles farther
Frand Rapids . Northern Kent County	02 1025EST 0 0 0 Hail (0.75) 02 1210EST 0 0 Hail (1.88)		east into Livingston County, but it apparently did not touch down again.
Genesse County, 5 miles S of Flint	82 1318EST	Hillsdale County, Camden	26 1739EST @ @ @ Hail (2.00)
Lenawee County, Cambridge Junction	82 1338EST 8 8 3 Thunderstorm	Shi more Commen	Strong winds occurred in the vicinity.  20 1800EST 8 8 8 Funnel Cloud
Washtenew County, Milan Macomb County,	82 1425EST 8.7 25 8 8 3 Termado (SI)	Shiawassee County, Durand	The funnel was seen to remain aloft, though there was some
2 miles NE of Washington	197100 1727		minor wind damage and some street flooding in the vicinity.
Wayne County, Detroit (NW side) Southeast St. Clair County	82 1448EST 8.3 28 8 3 4 Tornado (F1) 82 1447EST 8 8 8 Funnel Cloud	Livingston County, Just S of Hamell	26 1820EST 8 8 0 Funnel Cloud
St. Clair County, New Baltimore	02 1500EST 0 0 Hail (0.75)	Genesse County, Flint	26 1980EST B B B Funnel Clouds 0.1 10 Ø Ø Ø Tornado (FO)
Lapeer County, Columbiaville	82 1588EST 8 8 8 Thunderstorm		2 funnels were seen to the south from the airport control tower. 2 more were observed on the southeast side of the city. One was said to have touched down briefly.
	Rain and wind delayed a race at the Michigan International Speedway, A IV platfore was blown off the pressoav roof. Trees and tents were blown down		but no damage could be found along its short, narrow path.
	near Milan. The tornado near Washington was seen and and heard by several witnesses; tress.were blown down across roads. The tornado in Detroit tourhad down	Lapeer County, Metamora Twp.	26 1925EST Q Q B Funnel Cloud
	on the Jefferies Freeway just east of Brand River Ave, 2 persons were injured when a car was picked up and slammed against a retaining wall. 4 cars, I mobile home, and a pickup truck were damaged. The tornado	St. Clair County, Near Capac	26 2000EST 0 0 0 Funnel CLoud
	moved northeast into a residential neighborhood, doing	Washtenaw County, Just NW of Ann Arbor	26 2804EST 0 0 0 Funnel Cloud
	saw a dark dust cloud, heard loud noises, and felt low air pressure. Plants flew out the window of a house. The thunderstorm at Columbiaville blew a tree over	Central Marquette	27 114SEST # 8 8 Snow
	anto a car.	County	A few snow pellets were mixed with a rain shower at both Negaunee and Gwinn.
		10 miles NW of Part	28 1418EST & & 8 Waterspouts

																	. AUGUST 198
		OCAL	PATH HTA		NO. O PERSO		MATED! MAGE	CHARACTER			OCAL	РАТН	ATH )	NO. C		MATED!	CHARACTER
PLACE	DATE	TIME - LC STANDARD	LENGTH OF (MILES)	(YARDS)	KILLED	INJURED PROPERTY	CROPS	OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF (MILES)	WIDTH OF PATH (YARDS)	KILLED . ji	INJURED	CROPS	OF STORM
21 MINNESOTA	\		·				·		MINNES	OTA							
Aitkin Co.	4 1	740CST			0 .	0 0	. 0	Hail (1.75)	Mower Co.	i							
·· · · · · · ·	Golfba	ll size	hail fell	at Ce	edar I	Lake west	t of Ai	tkin.	Austin	26	0330CST		. ;	0	0 3	. 0	Thunderstorm Win
Beltrami Co.	١.,	430CST			i	0 0	٠.	Funnel		A bri	ef burst	of Wind	d from	a passi	ng thund	erstorm	snapped trees
beitrami co.			ighted by	а рі	٠.			f the Bemidji			ved most				20 úrumes	1 30011	on or Austri
	Airpor			·	•										. :	4.	
Anoka Co.	5 . 1	520CST			. 0	0 ?	0	Hail (1.75)	as AAICCICCIDDI		.,		•				
	Golfba	ll size	hail fell	in C	olumbi	ia Height	ts and	Fridley.	22 MISSISSIPPI			•					
Hennepin Co.		•	••						Magnolia, Pike County	١.	1055CST and nic	Vol ciz	o hail	. 0 foll at	0 ? Magnoli		Hail (1.00)
Brooklyn Center	5 1	5 25CST		٠. :	0	0 0	0	Hail (0.75)	Hickory Flat, Benton	1	1610CST	KE1 312	e inair	0	0 5		Lightning
Carlton Co.									County								/ Flat. The
Cloquet	5 1	5 25CST			0	0 0		Hail (1.75)	Charles Market County	e ·	itning ig		fire w		, -		rch. Hail (1.75)
•			hail fell	at C	loquet	t			Chunky, Newton County		1315CST ball si		fell =	·		U	naii (1./3)
Anoka Co.		510CST			0	0 2		Thunderstorm Wind	Southern Itawamba		1410CST						Thunderstorm Wind
Anoka Co.			n caused s	catte	red wi	ind dama		noka County. The	County				:: n trees	in Sou	thern It	awamba	County near the
	wind k	nocked t n-Ramsey	trees down at 1510C	and ST.	broke Farthe	windows er to no	on the rtheast	south side of a . the storm downed	3 Miles North of Iuka	1	Bee Fork			٥	0 . 3	2	Hail (.75),
	1537CS	T, large	li ft. in oak trees	diam were	eter : blown	in the La m down in	ake Geo n the w	rge area. At estern section of	Tishaminga County					Ü			Thunderstorm Win
	St. Fr	ancis.									e size ha es were b					. Also	, several large
Anoka Co.	9 1	720CST			0	0 0	. 0	Funnel,	Magnolia, Pike County	10	1415CST			0	0 ?	. 0,	Thunderstorm Wind
	A funn border		sighted by	loca	1 pol:	ice alon	g the H	Iam Lake/ Blaine		High	winds b	lew sev	eral tr	ees, dov	m in Mag	nolia.	:
Hennepin Co.			20 m	٠.		1		4.	Clarksdale, Coahoma County	1	1428CST						Funnel Cloud
Bloomington	16	1823CST			0	0 5	. 0.	Hail (2.0)	lawal lawa Canada	1	nnel clo 1510CST		sighted	l near (	larksdal		Th
Minneapolis	16	1840CST			0	0 ?	. 0	Hail (0.75)	Laurel, Jones County	1			lew dow	n trees	and pow	1.	Thunderstorm Wind es in Laurel. The
								omington into national Airport		hea							ne roofs were also
			s of hail o automob					40CST to 1900CST.	Southern Columbia, Marion County	10	1510CST	.50	50	0	0 5	0	Tornado (FO)
Ramsey Co.					٠.		•		mar roll county	A sr Colu	mall torn umbia. O	ado tou ne mobi	ched do le home	wn brie	fly in t	he sout	thern portion of ral trees twisted
Maplewood	16	1915CST			0 -	.0 ?	0	Hail (1.75)									were snapped off.
	Go1fb	all size	hail fel	l in N	Maplew	wood.	•		Clinton, Hinds Co.	10	1530CST			0	2 . 2.	Ö	Lightning
: Washington Co.		Ξ,	· ·				v - 1,										Clinton when
Cakdale	16	1925CST			0	0 ?	0	Hail (1.75)		seri	ously, a metal sc	lthough raps dri	one re iven in	ceived to the	a cut on back and	the le neck.	g and the other The paint on the
	1		hail fel	i i in C	Dakdal	le.				Both	ets was of the d throug	cyclists	consi	feet of dered t	the ant hemselve	enna wa s quițe	s disintegrated. lucky to have
n							,		West of Hattiesburg,		· 1535CST			. 0	0 ?	0.	Hail (1.00)
Renville Co. Olivia	16	2208CST		ė	, , ,	0 3		Thunderstorm	Forrest County		inch size	1	٠.		of Hatt		
	-							Wind	South Lauderdale Co.	10	1615CST			0	0	?	.Thunderstorm Win
Bird Island		2217CST	winds ble	u dos-	0	U 0	in 014	Hail (0.75)		Seve Coun	ral tree: ty.	s were t	olown d	own by	high win	ds in s	outhern Lauderdal
	, nund	C. SCOIM	wings pie	- uuwi	n powe	c. iines	211. 041		5 Miles East of	10	1735CST		47	. 0	1	.0	Thunderstorm Win
Blue Earth Co.		0007CSŤ			0	0 0	0	Funne1	Meridian, Lauderdale County	High	winds b	lew down	a few	trees	5 miles	east of	the Meridian ured the occupant
	Two f	unnels w	ere sight	ed `fi	ve mil	ies west	or Man	Kato.	Bay St. Louis and	17	1530CST				0 5		Thunderstorm Win
Goodhue Co.	17 0	130CST	•		0,	0 . 2-	0 :	Thunderstorm Wind	Waveland, Hancock Co.	High	winds b	lew down	numer	ous tre	es and p	ower lii	nes in Bay St.
								lines in Goodhue g in Kenyon.		of B	ay St. lo	ouis wer	e tossi	ed from	their b	oat, bu	ust off the coast t later rescued by Louis Yacht Club
	Sounty	TINGS	. core har		. 1001			5 an ava/out		were	overturi	ied or d	lamaged	. TO DOG	LS III d	uay St.	egus saent Liub
Jackson Co.	35	7E900~	. 1	•	·o ·	, ,		Thundananan	Poplarville and Picayune, Pearl River	٠	1720CST			; °	0 ?	. "	Thunderstorm Wind
Heron Lake	] .	352CST	over nin-	nove	U .	0. 4	Hi phun	Thunderstorm Wind y 60 near	County	Pop1	arville.	Trees	and por	wer lin	es were	s 12 mi blown d	les west of own in the Picayur
	Heron	Lake. M	lany trees	were	downe	ed in Her	ron Lak	e and shingles ing home collapsed	8 Miles South of		from the	: saille S	coim a	0	0 ?	?	Thunderstorm Wind
	in the		d fell th						Picayune, Hancock Co.			ere blo	iwn dowi	n by hi	gh winds		s south of Picayur
1										1 .	2.0						•

			AUGUST 1
	NO. OF ESTIMATED PERSONS DAMAGE		NO. OF ESTIMATED! PERSONS DAMAGE
PLACE	TIME - LOCAL STANDARD	R PLACE	TIME - LOCAL STANDARD CROPS STANDARD CR
MISSISS	IPPI	MISSOU	RI
Biloxi and Gulfport, Harrison County	25 1433CST 0 0 ? ? Hail (1.75) Hail as large as golfballs fell across portions of Gulfport am	Oregon and Ripley Counties	01 2125CST 0 0 4 0 Thunderstorm Win Scattered wind damage occurred throughout Oregon and Ripley Counties.
14 Miles Northeast of Meridian, Lauder- dale County	25 1500CST 0 0 ? ? Thunderstorm ! High winds 14 miles northeast of Meridian uprooted trees, down	1.1	08 1155CST 0 0 0 0 Hail (0.75) Hail of 1/2 to 3/4 inch in diameter fell near Anderson.
	power lines,and damaged 1 roof.	Macon and Shelby Counties (east of Macon to Clarence)	05 1745- 10 100 0 0 4 3 Tornado (F1) 1820CST A tornado moved from 10 miles east to 20 miles east of Macon, causing intermittent and scattered light tree damage along its discontinuous path.
23 MISSOURI  Vernon County	01 1725CST 0 0 0 0 Hail (0.75) Hail up to 3/4 inch in diameter fell between Moundville and Bronough	MOZOO1 Northwest Missouri	12- 2200- 0 0 5 5 Flash Flooding 13 0600CST Flash flooding occurred around Maryville as five inches of rain fell.
Vernon County	01 1730CST 0 0 3 0 Thunderstorm Wind damage occurred just west of Nevada on Highway 54.	24 MONTANA	
Barton and Vernon Counties	01 1755CST 0 0 3 0 Thunderstorm Wind damage occurred near Sheldon along the Barton-Vernon counline.	I MESSON	08 Before 2 3 High Wind Midnight
Greene County	01 1811CST 0 0 5 ? Hail (2.00), Thunderstorm t Hail up to 2 inches in diameter fell at the Springfield Airpor Some damage to small aircraft resulted from the wind and hail.		High winds and waves caused two boats to capsize on Holter Lake, killing two men, ages 64 and 27.
Greene County	O1 1820CST 0 0 ? ? Hail (1.75) Hail up to 1 3/4 inches in diameter fell at Bois D'Arc.	25 NEBRASKA	
Lawrence County	01 1829CST 0 0 4 0 Thunderstorm Wind damage occurred at Monett.	ind Dawes County	01 0625CST 0 0 0 0 Funnel Clouds Three funnel clouds were sighted south of Chadron State Park 12 miles south of Chadron.
Greene County  Greene and LeClede	01 1830CST 0 0 6 0 Thunderstorm to Extensive wind damage was done to trees and some buildings in Republic.		06 1642CST- 0 0 6 6 Hail (4.0) 1655CST Two to four inch hail fell in Valentine and areas about 5 miles to the north and northeast. Windows were broken out of buildings and roofs damaged. A hole was punched into the roof of a mobile home. Wehicles were dented and had windows broken. Crops
Counties Webster County	Wind damage occurred at Lebanon and at the airport in Springfic	Cherry County	sustained heavy damage.  06 1655CST
	Winds caused scattered damage to power lines and trees in Websi County.	er Cherry County	06 1815CST- 0 0 4 4 Thunderstorm Wir 1830CST Hail (1.5) Winds damaged a home and a garage 10 miles north of Elsmere. One and a half inch hail dented vehicles and damaged crops.
Webster County	01 1915CST 0 0 4 0 Thunderstorm Wind damage occurred in Rogersville and Fordland.	Cherry County	06 1820CST O O O Funnel Cloud A funnel cloud was reported north of Elsmere.
Wright County  Christian County	01 1928CST	Cherry Counties	06 1900CST 19 70 0 0 6 4 Tornado (F2) A tornado touched down around Elsmere and moved south and west on the ground at intervals, then lifted 6 miles east of Thedford. Irrigation systems were destroyed, hay stacks demolished, and power lines downed between Thedford and Halsey. Fifty wind mills were destroyed, including 17 near Elsmere and 8 west of Purdum. Utility lines were also damaged west of Purdum.
Taney, Ozark, and Douglas Counties	01 1930- 2000CST Winds did widespread, scattered damage to trees and power lines	Braine county	06 1940CST 0 0 4 4 Hail (3.0) Three inch hail fell near Dunning, damaging vehicles and crops.
Wright County	across Taney, Ozark, and Douglas Counties.  Ol 1950CST	Thomas County	06 1943CST 0.2 25 0 0 4 2 Tornado (F1) Tornado touched down for a short distance 2 miles south of Halsey, damaging power lines.
Texas County	Power lines and trees were downed in Mountain Grove.  Ol 2000CST 0 0 4 0 Thunderstorm 0	Thomas County	06 1943CST 0 0 0 2 Hail (3.0) Three inch hail was reported 2 miles south of Halsey where it did pasture damage.
Ozark County	Power lines and trees were downed at Cabool.  Ol 2000CST	Platte County	06 2030CST- 0 0 6 3 Thunderstorm Win 2050CST (59) Winds estimated 60 to 80 m.p.h. downed numerous trees and power lines from Columbus to Platte Center to Humphrey.
Howell County	01 2010CST 0 0 4 0 Thunderstorm V Trees and power lines were downed in Willow Springs.	11 *	06 2043CST 0 0 0 0 Funnel Cloud A funnel cloud was sighted 10 miles north of Brady.
Howell County	01 2030CST 0 0 4 0 Thunderstorm Wind damage occurred in West Plains.		O6 2055CST O O ? 3 Hail (3.0) Three inch hail fell just west of Callaway. Some damage to pastures occurred.
Oregon County	01 2100CST 0 0 3 0 Thunderstorm V Winds of up to 60 mph produced tree damage at Thayer.	ind Butler County	06 2055CST 0 0 6 5 Thunderstorm Win (69) Strong winds estimated to 80 m.p.h. did considerable damage to trees, buildings and crops at David City. Five trailer houses

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PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (MILES) WIDTH OF PATH (TARDS) KILLED CROPS CROP	PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (MILES) WIDTH OF PATH (AMLES) WIDTH OF PATH (AMLES) WIDTH OF PATH (AMLES) CROPS - OOU DAWAGE CROPS - OOU CROPS - OOU DAWAGE CHARCEL OF CROPS - OOU DA					
NEBRAS	iKA	NEBRAS	SKA					
Keya Paha County	06 2110CST 0 0 5 4 Thunderstorm Wind (60), Hail (1.75) Sixty m.p.h. winds and one and three-quarter inch hail caused window and roof damage at Mills. Nearby cornfields were stripped.	Nemaha County	12- 2315CST- 0 0 3 5 Hail (1.5) 13 0000CST Hail to 12 inches heavily damaged crops southeast of Auburn and from around Peru to Nemaha.					
Holt County	06 2155CST 0 0 3 3 Hail (1.75) One and three-quarter inch hail fell around Atkinson, damaging some vehicles and crops.	Richardson County	12- 2330CST					
Lancaster County	06 2216CST 0 0 6 4 Thunderstorm Wind (69)  Downburst winds of 79 m.p.h. at the Lincoln airport flipped a helicopter over and badly damaged terminal jetways. Many windows in northeast Lincoln were blown out. Numerous boats were badly damaged and blown on shore at Branched Oak Lake 10 miles northwest of Lincoln.	Banner County	wind gass setmeded volume to the mouth of the Nemaha River. The winds destroyed barns and sheds, lifted roofs off of other barns, uprooted trees, and damaged utility lines. Some of the trees fell on vehicles and homes. Wind and hail also broke windows, damaged roofs and siding, and dented vehicles.					
Clay County	06 2340CST 0 0 4 4 Thunderstorm Wind Strong winds downed trees and damaged outbuildings in Glenville.	battiler councy	Three-quarter to 1% inch hail from 4 to 10 miles north of Harrisburg damaged crops.					
Boone County  Kearney, Adams, Franklin, and	06 2355CST 0 0 3 0 Thunderstorm Wind Winds uprooted trees at St. Edward.	Cass and Saunders Counties	14 1735CST 0 0 4 4 Flash Flood 1900CST Around 4½ inches of rain in less than 2 hours caused urban flooding at Greenwood. Crops were damaged from heavy erosion and ponding water. Other urban flooding was reported at Ashland.					
Webster Counties	OCOUCST  OCOUCST  Hail (1.75)  Winds and hail up to one and three-quarter inches did extensive damage along a 4 to 6 mile wide path near Campbell to south of Holstein and then to east of Red Cloud. Webster Country was	Pawnee County Dixon and Dakota	14 2105CST 0 0 · 0 3 Hail (1.5) One and a half inch hail at Table Rock caused minor crop damage.  16 .2310CST - 0 0 5 3 Thunderstorm Wind					
Webster County	hardest hit, with over 2 million in crop damage.  07 0030CST	Counties	2345CST (61) Winds estimated to 70 m.p.h. uprooted trees and damaged utility lines at Emerson. Homes were also damaged by fallen trees. Other damage was reported at Newcastle, Allen, Dakota City, Hubbard and Homer.					
Clay County.	07 0123CST 0 0 4 0 Hail (1.5)	Burt County	17 0017CST 0 0 4 1 Thunderstorm Wind Wind gusts damaged buildings and trees at Lyons.					
Adams County	One and a half inch hail damaged property in Harvard.  107 0127CST- 0 0 5 4 Hail (1.5) 0140CST	Buffalo County	18 0930CST 0 0 4 0 Lightning Lightning heavily damaged a church bell tower in Ravenna.					
	One and a half inch hail fell around Lake Hastings and Holstein, damaging buildings, vehicles and crops.	Dodge County	18 1030CST 0 2 0 0 Lightning Just south of North Bend, two highway workers mowing weeds were injured when struck by lightning.					
Clay County	07 0140CST 0 0 3 3 Hail (0.75) Three-quarter inch hail fell in Fairfield.  07 0240CST 0 0 4 3 Thunderstorm Wind,	Howard County	18 1054CST 0 0 0 3 Hail (1.0) One inch hail 11 miles north-northwest of Grand Island caused					
-	Hail and strong winds destroyed 2 small buildings and damaged vehicles in Glenville.	Howard County	minor crop damage.  18 1100CST 0 0 6 4 Hail (1.5) One and a half inch hail fell in St. Paul for 20 minutes, causing					
Scottsbluff County	08 1610CST 0 0 5 3 Thunderstorm Wind, Hail (0.75) Strong winds tore down a large grain elevator 10 miles south of Lyman. Three-quarter inch hail also damaged crops.	Hall County	considerable damage to vehicles, roofs and trees.  18  1155CST					
Banner County	08 1630CST- 0 0 5 4 Thunderstorm Wind, 1745CST Hail (0.75) Three-quarter inch hail and 60 m.p.h. winds were reported from 10 miles northwest to 13 miles southeast of Harrisburg. There was damage to roofs and crops.	Hamilton County	18 1220CST- 0 0 5 3 Hail (1.5) 1227CST One and a half inch hail fell around Aurora and Phillips, causing damage to vehicles, buildings and crops.					
Banner County	08 1700CST 0 5 3 Flash Flood Heavy rain in Harrisburg resulted in flooding which damaged six homes.	Johnson County  Gage County	18					
Howard County	09 2155CST 0 0 0 3 Hail (1.5) One and a half inch hail fell between St. Paul and St. Libory, causing some crop damage.		Hail (1.5) One and a half inch hail and strong winds damaged crops 2 miles west of Beatrice. Some trees were uprooted and minor roof damage was reported.					
Saline County	11 2200CST 0 0 3 3 Flash Flood Five inches of rain near Dewitt resulted in lowland flooding along Turkey Creek and a portion of the Big Blue River.	Saunders County	20 1530CST 0 0 3 4 Flash Flood 1730CST Four inches of rain in about 2 hours at Prague caused lowland and street flooding. Some crops were damaged by field erosion.					
Sioux County	.11 2219CST 0 0 ? 3 Hail (1.5) One and a half inch hail 9 miles west of Fort Robinson damaged rangeland.	Saunders County	20 1615CST 0 2 4 0 Lightning Lightning struck a farm home at Weston injuring two people in a doorway. Windows were blown out of some areas in the home and					
Sloux County	11 2233CST 0 0 ? 0 Thunderstorm Wind (52) Wind gusts were estimated to 60 m.p.h. just south of Crawford. No reported damage occurred.	Brown County	wiring and appliances sustained damage.  31   1500CST   0.1   20   0   1   Tornado (FØ) A small tornado touched down briefly just north of the Ainsworth					
Richardson County	12 2145CST 0 0 3 4 Hail (1.5) One and a half inch hail fell just north of Humboldt, damaging crops.		airport					
Nemaha and Richardson Counties	12- 2250CST- 0 0 6 6 Flash Flood							
	madey creek was forced out of banks.		e e					

PLACE	TIME - LOCAL STANDARD  LENGTH OF PATH (WILES) WIDTH OF PATH (TARBS) MILLED  RILLED  RILLED  RILLED  ROOPERTY  CROPS  CROPS  ROOSSASA  CROPS  ROOSSASA  ROOPERTY  CROPS  ROOPERTY  ROOPERTY  ROOPERTY  ROOPERTY  CROPS  ROOPERTY  ROOPERTY  CROPS  ROOPERTY  ROOP	PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (MILES) WIDTH OF PATH (TARDS) RILLED STORMAN STORMAN CROPS RILLED ROPERTY CROPS CRO
26 NEVADA		NEW HA	MPSHIRE
Clark County	11 1500PST 0 0 5 0 Flash Flood	Carroll County	07 1650EST short narrow 0 0 6 Tornado (F1)
	Heavy convective rains in S. Clark County washed out a section of the Needles road south of Laughlin. 2.5 inches of rain was reported at a scout camp 6 miles south of Laughlin. The road repairs required two days before the road was reopened. Urban street flooding was reported in the towns of Jeans and Searchlight during this storm.		Eyewitnesses reported a waterspout or tornado moved northeast across Lake Winnipesaukee and hit the shore near the mouth of the Melvin River in the Melvin Village section of Tuftonboro. The National Weather Service survey team said "The tornado was lifting up into the clouds as it made landfall. Trees were twisted off gradually upwards for a distance of 100 feet. The rest of the damage in Melvin Village was from apparent Straight-line winds of 80 to 90 mph." Most of the damage was along Route 109 where hun-
Eureka County	20 Noon PST 0 0 0 0 Funnel Cloud  A funnel cloud was sighted and photographed 30 miles south of the town of Eureka at noon. No other information is available.		dreds of trees were either uprooted or snapped off. These trees fell on power lines, houses and cars, leveled one garage, and impeded travel. Three homes were extensively damaged by the fallen trees and a few buildings were lifted and tilted by uprooted trees.
Clark Count.	24 0030PST	Sullivan County	07 1845EST 0 0 5 Severe Thunder- storm
Clark County	24 0030PST 0 0 3 0 Thunderstorm wind Minor wind damage to the Willow Beach Marina was caused by 60 MMPH winds. Willow Beach is south of Boulder City on the Colorado River. No injuries were reported.		In the Walpole-Charlestown area, winds during a severe thunder- storm downed 3 to 5 telephone poles and trees up to 18 inches in diameter. About 1,500 Charlestown residences were without power for 1½ hours, and about 75 for 9 hours.
White Pine County	26 1216PST 0 0 0 0 Thunderstorm	Sullivan County	07 1930EST 0 0 3 Severe Thunder- storm
	A convective wind gust of 52 knots was recorded at the Ely Airport. No injuries or damage was reported.		In Lempster, winds from a severe thunderstorm blew two trees down onto a road, blocking traffic.
Lyon and Nye Counties	26 1735PST 0 0 0 0 Thunderstorms	Merrimack County	07 2030EST 0 0 5 Lightning
	A number of other convective weather events occurred in the state on the 26th. These are not reportable individually, but uall together are significant since they cover such a large area. Heavy rain and strong winds were reported in Lyon County with some street flooding at 1736FST. A convective gust of		In Franklin, lightning struck the outside electrical wires and ignited a fire inside the wall of a second story bedroom. The ceiling and wall had to be removed to extinguish the blaze. The fire was contained to one room, but the house received much smoke and water damage.
	38 knots was reported at Desert Rock in Nye County at 2235PST. Strong winds were also reported at Beatty during the same	Carroll County	07 Night 0 0 5 Lightning
Nua Causahu	time frame.  26 2340PST 0 0 0 Flash Flood	Cheshire County	A lightning-induced fire totally destroyed a barn in Madison.  O7 Late Night 0 0 5 Thunderstorm
Nye County	Highway 160 southeast of Pahrump was reported flooded for a 1/2 mile stretch with 6 inches of water. No lasting damage or injuries were reported.	chestiffe councy	Saturated soil coupled with heavy downpours during a slow-moving thunderstorm washed out roads in Alstead. Much of Route 123 through Alstead had only one lane open to traffic due to the surging waters of the Cold River. A house on River Road was hit by lightning. There was no fire, but some damage to the wiring
Elko County	28 1500PST 0. 0 0 0 Heavy Rain A mud slide caused by heavy rain blocked the road into Lamoille Canyon. The slide was 6 feet deep and trapped approximately 30 people for 4 hours until the road could be cleared. No injuries or permanent damage was reported.		was reported. In Keene, another lightning bolt hit a Jordan Road home about 1920EST, punching a hole in the kitchen baseboard and disconnecting the telephone, but no fire ensued.
	The state of parameter demographic reported in	Sullivan County	07 Late Night 0 0 5 Thunderstorm
			Saturated soil coupled with heavy downpours during a slow-moving thunderstorm washed out roads in Charlestown and Acworth. Hardest hit was Route 132A in South Acworth which was severely damaged.
27 NEW HAMP	SHIRE	Hillsborough County	17 1530EST 0 0 4 Thunderstorm
Sullivan County Grafton County	01 Afternoon 0 0 4 Lightning Lightning struck and killed a bull in a barn in Springfield. 01 Late Night 0 0 5 Thunderstorm		A thunderstorm dropped an inch of rain in about 45 minutes over Nashua, causing local street flooding. Problem areas were Stark, D, Greeley, Temple and Hayden Streets, Hall Avenue, and the Daniel Webster Highway at Silver Drive. Lightning damaged an electrical transformer, knocking out the power for 50 to 60 customers on Kinsley Street.
	Saturated ground coupled with torrential downpours from a thunder- storm caused three mudslides in Bristol that made roadways nearly	Rockingham County	18 . 0507EST 0 0 3 Lightning
	impassable. A banking, along Route 3A, south of Our Lady of Grace Chapel, slid into the highway. The others occurred alongside the newly constructed condominiums at Manor Estates and at Bungalo Village.	Hillsborough County	In Raymond, lightning struck and set fire to a telephone pole at the corner of Christie Court and Prescott Road. The fire was extinguished, but the pole apparently needs to be replaced.  18 1100EST 0 0 5 Thunderstorm
Strafford County	06 1400EST 0 0 4 Lightning	y	Nashua again suffered local street flooding for the second day in
	A lightning bolt set three sections of power lines on fire on Walnut Street, and they fell to the ground. Power was disrupted for about 1½ hours. Another bolt burned a backyard shed on Union Street.		a row from heavy downpours during a thunderstorm. Several streets and driveways were washed out. The worst flooding occurred at most of the major intersections on Nashua's Daniel Webster Highway which were under more than a foot of water. The deepest was 3 feet at the intersection with Silver Drive.
Carroll County	07 1610EST 1.5 100 0. 0 5 Tornado (F1)	Coos County	24 1700EST 1 0 0 Snow and High
	A tornado began near the Wakefield-Effincham town line on the west shore of Province Lake. It took down large trees on Bailey Road and broke boats from their moorings, lifting them out of the water. It moved across Province Lake and reached the Nutter residence on the east shore where many windows, sash and all, were lost, a large shed door was blown in, apple trees were ripped from the ground and moved 50 yards away, and the well house was tipped over. The back side of the barn was badly damaged and set at least ten inches off its foundation. From the Nutter residence, it entered Parsonsfield, Maine where Route 153 meets the state line. The path in New Hampshire was approximately 1½ miles long, of which one mile was over Province Lake. The maximum width was almost 100 yards as it entered Maine. The total length was nearly three miles.		A 52 year old Massachusetts man died from hypothermia and exposure on Nount Madison, elevation 5,363 feet. He was hiking with his 13 year old son and a 16 year old German exchange student. The party reached the summit at 1700EST where the temperature had dropped to freezing and the winds registered 60 mph with gusts to 90 mph. It was sleeting and snow was accumulating. Dense fog also shrouded the summit. The party did not carry packs and were lightly clothed for the trek. The 16 year old made it to the Appalachian Mountain Club's Madison hut. A rescue team found the other two at around 2200EST about 100 yards from the summit. The 52 year old was barely conscious, seriously hypothermic and unable to walk. The barren rocky cone was now covered with rime ice. This, combined with the darkness, steep terrain, fog, sleet and cold, prevented rescuers from bringing him down until Monday
			morning. The two youths were treated for hypothermia at the hut. Two other hikers were overdue on a roundtrip of Mount Washington, elevation 6,288 feet. They were experienced and well equiped, and

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	PLACE	TIME - LOCAL STANDARD STANDARD STANDARD STANDARD CROPS WIDTH OF PATH (YARDS) CROPS C	PLACE	STORM  CHARACTER OF BATH  WOLLD BY STORM  CHARACTER OF STORM  CHAR
	L	TIME STANIOTH (Y)		TIME STAND STAND WIDTH C (MILLED INJURED PROPER CROPS
	NEW HA	AMPSHIRE	30 NEW YORK	Central
		tented out Sunday night in a saddle between two exposed summits on	Cortland County	
		the Glen Boulder Ridge trail. A search party found them Monday morning in excellent shape. Mount Washington reported tempera-	Cortifala County	01 1430EST 0 0 4 0 Flash Flood Hoxie Road in Cortlandville was rendered impassable by a flash
	, .	tures hovered at freezing, snow and ice covered the summit, and winds gusted to 120 mph Sunday night.		flood. Also damaged were two (2) homes. One (1) family stayed the night in their home while surrounded by flood waters. Small,
•	. :			pea size hail was also reported with the downpour.
•			Albany County	01 1800EST 0 0 6 0 Flash Flood
	28 NEW JERSEY	(, Northern		Stationary thunderstorms dumped several inches of rain in the areas upstream of the village of Altamont; the resulting flood cause
	Somerset County	02 1458EST 0 0 0 Funnel Cloud		approximately 1/2 million dollars worth of damage.
٠,		A funnel cloud was observed in Basking Ridge as very heavy thunderstorms moved through Somerset County.	. Orange County	01 Unk 0 0 5 0 Lightning
٠.	Morris County	02 1925EST 0 0 0 0 Thunderstorm Wind		Approximately 5000 homes were without power due to frequent lightning strikes in Orange County.
		A severe thunderstorm passed over Morristown Airport. The airport reported winds gusting to 60 knots (69mph).		22 1/22727
		The same substitution of knots (sample).	Schenectady County Schenectady County	02 1500EST 0 0 7 0 Flash Flood 02 1600EST 0 0 4 0 Mudslide
				Very slow-moving thunderstorms assaulted the Capital District for a second day, this time causing flooding in the Schenectady-
	28 NEW JERSE	Y, Southern NONE REPORTED		Scotia-Glenville area of Schenectady County.
			Hamilton County Hamilton County	03 1615EST 0 0 4 4 High Winds 03 1615EST 0 0 0 0 Hail (0.75)
	20 NEW 44 EVIC		Albany County Rensselaer County	03 1610EST 0 0 3 3 Hail (0.75) 03 1629EST 0 0 3 3 High Winds
	29 NEW MEXIC			A thunderstorm with strong winds and 3/4 inch hail hit the
	Guadalupe County	04 PM 0 0 ? ? Hail		village of Hamilton. Winds bent a new steel flag pole, and uprooted trees. Other severe thunderstorms struck the Capital District, downing trees and producing 3/4 inch hail.
	in the second	Marble-size hail fell on Santa Rosa and vicinity. Windows in houses were broken, automobiles were		producing 374 field mark
		dented, and gardens were destroyed. Some insur- ance claims were turmed in, mostly on automobiles and mobile homes.	Broome County	06 1700EST 0 1 5 0 Flash Flood
	Otero County	13 1930MST 2 2 ? 0 Flash Flood		The Oquaga, "Big Hollow Creek and the Bone Creek overflowed their banks and caused extensive flooding in parts of the village of Deposit and Windsor.
		A vehicle with 5 people was driven into flooded		
		county road A-43 at La Luz Creek, just north of Alamogordo. The car was found one mile down the creek and the bodies of two females, two miles from the county	Onieda County Saratoga County	07 1335EST 0 0 3 0 High Winds 07 1428EST 0 0 0 0 Hail (1.0)
ĺ		road. F32V. F4V	Saratoga County Saratoga County Saratoga County	07 1450EST 0 0 2 2 Hail (2.5) 07 1500EST 0 0 0 0 Hail (1.0) 07 1500EST 0 1 3 0 Lightning
	De Baca County	22 PM 0 0 4 4 Thunderstorms	Washington County Herkimer County	07 1515EST 0 0 0 3 High Winds 07 1603EST 0 0 0 0 Hail (0.75)
		Winds/Flash Floods/ Lightning High wind and rainfall of up to six inches caused	Hamilton County Madison County Washington County	07 1603EST 0 0 2 2 High Winds 07 1618EST 0 0 2 0 High Winds 07 1620EST 0 0 2 2 High Winds
	Hidalgo County	damage to streets, barns, etc., at Fort Summer.	Onieda County Warren County	07   1620EST   0 0 2 2   High Winds
	nicalgo county	22 2130MST 0 0 ? ? Thunderstorm Winds High winds caused a roof to blow off a barn at	Madison County Clinton County	07
		Lordsburg.	Madison County Onieda County Onieda County	07 1645EST
	Lea County	26 PM 0 0 4 0 Thunderstorm/ Heavy Rain Bigh winds blew off the roof of a church, and heavy	Onieda County Fulton County	07 1645EST . 0 0 3 0 High Winds 07 1655EST 0 0 2 2 Hail (1.0)
		rains caused considerable damage inside the church.	Fulton County Herkimer County Saratoga County	07 1655EST 0 0 4 2 High Winds 07 1730EST 0 0 4 0 Lightning 07 1755EST 0 0 0 0 8ail (1.0)
	Chaves County	31 1830MST 0 .0 5 0 Thunderstorm/High	Fulton County Washington County	07 1755EST
	• • • •	Winds	Montgomery County Saratoga County	07 1808EST 0 0 2 2 High Winds 07 1835EST 0 0 0 0 Hail (0.75)
		Damage occurred to the airport and town of Hagerman. One plane was damaged.	Schenectady County Schenectady County Albany County	07 1835EST 0 0 3 4 High Wind 07 1845EST 0 0 3 0 Lightning 07 1935EST 0 0 0 0 Hail (0.75)
			Rensselaer County	07 1945EST 0 0 0 0 Hail (0.75)
,				Golf ball size hail and strong gusty winds created havoc for local power companies. An electrical storm killed power to the
	30 NEW YORK,	Coastal		village of Herkimer and was blamed for a garage fire in Illion. The storm also felled many large trees in Herkimer County, the result of strong gusty winds.
٠		08 0958EST		
		A pilot on the ground at East Hampton Airport in Suffalk County	Onieda County	07 1600EST 0 0 4 0 Flash Flood
		observed three funnel clouds north of the airport.		Heavy downpours created minor flood problems in Rome-New London
				areas.
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PLACE	PATE STANDARD LENGTH OF PATH (MILES) WIDTH OF PATH (MILES) WIDTH OF PATH (MILED) CROPS CRO	PLACE	TIME - LOCAL STANDARD CHENGTH OF PATH WIGHES) WILED WILED CHARGE CHARGES CHARG
NEW YO	RK, Central	30 NEW YORK,	Western
Albany County Saratoga County Schenectady County Washington County Warren County	07   1600EST	Chautuagus & Cat- taraugus Counties	Thunderstorms pounded a 15-mile wide strip from Dunkirk (Chautauque County) eastward to northern Cattaraugus County. They caused Canadaway Creek (Chautauqua County) and Thatcher Brook (Cattaraugus County) to inflict widespread property damage from flash
	inches of rain was received on Saturday afternoon; lightning detectors indicated up to 10,000 ground strikes in the Capital District during the storm. The rain was so intense that boats on Saratoga Lake sank from the rainfall.  Extensive flooding occurred in southern and eastern portions of Saratoga County and most of Schenectady County, as well as in the hill towns of Albany County. Damages in the millions of odlars were reported. For some areas, this was the second flash flood event in approximately a week's time.  For the first time in history, racing at the Saratoga Race-Track was stopped, and in some cases, people were taken out by boats. Washout Road in Schenectady County suffered a major flood almost 100 years ago to the day; it is located over the Washout Creek. Other major streams which flooded included: the Wormanskill,		flooding.  Thatcher Brook scoured its banks, undermined a half-mile stretch of Route 62, washed out 3 private bridges, eroded large oreas of land, and flooded residential streets of Gowanda where water got up to 5 feet deep. More than 200 homes suffered flood damages. A newspaper set the loss at \$1 million.  Canadaway Creek damaged 101 homes, 19 bridges, and 11 businesses, in addition to roads and a few public buildings. Uninsured damages alone amounted to \$4.0 million. There was no report on the amount of loss to insured property, but this is believed to be high also.
Washington County	Bozenkill, Schylerkill, Moccasinkill, and the Krome Kill.  A mud slide was reported near Exit 26 of the New York State Thruway.  14 1830EST 0 1 5 4 Lightning		There were no known injuries and deaths directly attributable to the flood. However, an indirect casualty from drowning occurred when 2 kid brothers were swept away into Lake Erie by water gushing from a sewer pipe at Wright Park Beach. Jumping in to the rescue, their father was able to push both kids back to safety, but he later Submitted to the strong currents.
	Lightning resulted in a barn fire.	Niagara County	01 1930 EST
St.Lawrence County	15 1730- Unk Unk 1 3 5 4 Tornsdo (F2) 1745EST  A tornsdo was sighted by four (4) persons in the Somerville- Governeur area. Thousands of trees were downed, four (4) barns destroyed, one (1) man and two (2) horses killed, and many homes damaged or destroyed.  M-29-0	Erie County	Hail damaged gardens and broke tree limbs in Youngstown and Cambria. It also damaged tomantoes and apples in Newfane and Sanborn.  D3 0500 EST D 4 D TSTM Wind  Trees were downed in Grand Island. A large maple tree was downed in the town of Williams-ville.
Onieds County Onieds County Herkimer County Herkimer County Herkimer County Otsego County	15	Genesee & Monroe Counties	03 1640 EST . 0 0 3 5 TSTM Wind and Hail (1.50)  Strong winds downed trees in the town of Bergen, Genesee County; and in Churchviller, Chilis and Henrietta, all in Monroe County.  Large hailstones pelted a 1/2-mile wide area
	A small bridge on the county line was washed away by a flash flood of a small creek. Blackouts were also reported in the Alder Creek, Forestport-Woodgate-Poland area, as well as the Camden-Lee area of Onieda County.		from Alabama, Genesee County, eastward to Mon- roe County. Three hundred acres of beans and 200 acres of cabbase were destroyed. There were also damages to corn and beets.
Madison County  Otsego County	15 Unk-PM 0 0 5 5 Downburst Wind  Downburst winds knocked over two (2) silos and shattered several farm outbuildings. Less than one (1) mile northeast of the main damage area, a stand of poplars were also knocked down.	Oswego & Cayuga Counties	07 1315 EST 0 0 5 0 TSTM Wind, Hail (1.00); & Lightning Thunderstorms downed trees and power lines in Port Byron and Weedsport in Cayuga County, Lightning ignited a house in Weedsport and caused \$4000 damage.
Herkimer County	Heavy rains washed down a mountain side near Omeonta.		Hail and damaging winds were reported at Hannibal and Granby, Oswego County where uprooted trees damaged homes, cars, and businesses.  More than 1500 homes were without power for
	For the second time in a month, flash flooding hit Middleville.	Onondaga County	several hours
Dutchess County	21 1825EST 0 1 4 0 Flash Flood  Loose gravel and sand washed out during a heavy downpour, causing		Thunderstorms felled trees and severed power lines in North Syracuse.
	a road surface to sink by two (2) feet. One (1) man was slightly injured trying to escape from his car.	Lake Ontario near Orleans County	11 0600 EST 1 0 4 0 High Wind At Braddock Bay, waves of up to 6 feet capsized a boat,killing a passenger. M370
Fulton County	23 2220EST Unk Unk 0 1 4 5 Tornado (F1)  A tornado touched down in the town of Caroga late Saturday night; damaged were several summer camps, boats, a boat house and hundreds of trees. The main power feed cable and telephone cables were also damaged. One (1) women reported being partially sucked out of her living room window. One metal shed was also found wrapped around a tree, approximately 100 feet above ground. No site investigation was done, but the event was classified a tornado due to an eyewitness' observation.	Oswego, Onondaga, Tompkins, Tioga, Seneca, & Schuyle Counties	15 1730 EST D D 4 D TSTM Wind, Lightning, & Rain  Thunderstorms toppled trees and snapped electrical wirds in Volney, Fulton, Williamstown, West Monroe, and Palermo, all in Oswego County; and in parts of Tompkins, Seneca, Tioga, and Cayuga Counties.
			A bolt of lightning struck a power line out- side a storage building in Syracuse, causing a small fire in the cellar.

			AUGUST 1986
PLACE	TIME - LOCAL STANDARD LENGTH OF PATH MILES) WILLED RILLED RODE RTT CROPS	PLACE	TIME - LOCAL STANDARD - LOCAL STANDARD - LOCAL STANDARD - LOCAL STANDARD - LOCAL CENGTH OF PATH (TAROS) - SLOW SLOW SLOW SLOW SLOW SLOW SLOW SLOW
NEW YO	RK, Western	NORTH	CAROLINA
NYZOD1 , Genesee & Wyoming Counties	26 1900 EST D D 3 D High Wind  A cold front with gustS of up to 52 miles an hour moved across the area. It downed trees and power lines in portions of these counties.		down. Residents were without power for as much as 3 to 4 hours after the storm. In the piedmont, other storms were responsible for damage. A very severe storm affected much of eastern Gaston County. Dozens of trees were blown down in the Belmont, Mt. Holly, and McAdenville areas. At McAdenville, a smokestack was blow off at a mill, trees up to 4 feet in diameter were uprooted
NYZO21-022 Chautauqua and Niagara Counties	Jun., Jul., & Aug		or blown down, a truck trailer was blown over, and the windows were blown out of a pickup truck. As the storms moved to the east, reports of downed trees and limbs were received from several locations in Mecklenburg County, and dime size hail was reported at Indian Trail in Union County.
	low yield of corn; wheat; tomatoes; grapes; and other crops.	Lexington, Davidson County	05 1430EST 1 0 4 0 Lightning
N MORTH CAP			A man was struck by lightning as he sat on a lawn mower. He died about 20 minutes later. The same storm caused other problems in the city, including a few house fires and many power outages. Lightning M600.
31 NORTH CAR	CULINA	Denver, Gaston County	06 1207EST 0 0 ? ? Hail (0.75)
10 E Topsail Beach, Pender County		Southern Mecklenburg County Madison to Stone- ville, Rockingham	06 1340EST 0 0 ? ? Thunderstorm Winds (52) 06 1447EST 0 0 3 ? Thunderstorm Winds
	A waterspout moving northeast was observed by the public.	County Northern Surry	06 1545EST 0 0 5 5 Thunderstorm
Roxboro, Person County Southern Person	02 1740EST 0 0 5 0 Thunderstorm	County	Winds, Hail (1.75),
County Northern Durham County	Winds 02 1903EST 0 0 3 ? Thunderstorm		Lightning  Dime size hail was reported at Denver in Gaston County, and a
Durham County	02 1920EST 0 0 4 0 Thunderstorm		gust to 52 knots was measured in southern Mecklenburg County, Storms of greater intensity were observed in the Northwest
Vass, Moore County	02 1930EST 0 0 ? ? Thunderstorm		Piedmont. Trees were blown down at several locations in Rockingham County, and in Surry County, a storm swept across
Lake Wheeler Area, Wake County Durham, Durham	02 1930EST 0 0 ? 0 Hail (1.00) 02 1935EST 0 0 4 0 Thunderstorm		most of the northern half of the county. \$300,000 damage to tobacco was caused by hail up to golfball size, lightning caused houses to be destroyed by fire, and trees and power lines were
County Warren County	02 1940EST 0 0 ? ? Thunderstorm		blown down.
RDU, Wake County		Morganton, Burke County	.07 1600EST 0 0 3 0 Thunderstorm Winds
3 SE Apex, Wake	02 2030EST 0 0 4 0 Thunderstorm	S of Hickory, Catawba County	07 1635EST 0 0 4 0 Thunderstorm Winds
County Spring Hope, Nash County	Winds 02 2040EST 0 0 3 0 Thunderstorm Winds	NE of Lincolnton, Lincoln County Statesville,	07 1730EST
Whitakers, Nash County	02 2115EST 0 0 3 0 Thunderstorm Winds	Iredell County Dallas, Gaston County	07 1836EST 0 0 ? Thunderstorm Winds Winds Winds Winds Winds (50)
	A severe thunderstorm developed over Roxboro during the early evening, and caused substantial damage in the town. The roof of	Southeastern Caldwell County	07 1900EST
	a car dealership was removed, and several other buildings were damaged. Damage was estimated at over \$100,000 in town. The	Charlotte, Mecklenburg County	07 1903EST
	storm moved slowly south through the county, and then moved into Durham County. Trees were blown down near Rougemont and Bahama, and then over much of the rest of the county. In the city of	Charlotte, Mecklenburg County	07
	Durham-many trees were blown down, some onto houses and cars. Numerous power outages were also reported. A storm also moved across much of Warren County, blowing down trees, limbs, and		South of Hickory, at Maiden, a portion of the roof of a house was blown off, and trees were blown down. About a dozen large trees were uprooted, and shingles were blown off a house just
	power lines. And a storm in Moore County caused trees to be blown down. The storms in the Durham area slowly moved into		northeast of Lincolnton. At Statesuille, the roof of a mobile home was removed and blown against some vehicles. Some large trees were blown across power lines. Trees and power lines were
· ,	western Wake County. 53 Knots were measured at the Raleigh-Dunham airport, where several airplanes suffered minor damage, and a more severe storm near Apex tore down farm		blown in much of southeast Caldwell as a storm moved through that area. Similar damage was reported in and near Morganton in
	buildings, causing about \$15,000 in danage. Power lines were torn down at Spring Hope and WhitaKers as a storm moved across Nash County.		Burke County. A gust to 50 knots was reported by spotters at Dallas in Gaston County, and dime size hall fell and at least 20 trees were blown down as's severe storm slowly moved across Charlotte and Mecklenburg County.
Hubert, Onslow County	03 1415EST 0 0 0 ? Thunderstorm Winds	Cary, Wake County	10 1438EST 0 0 3 0 Thunderstorm Winds
Gibson, Scotland County	03 1500EST	Louisburg, Franklin County	10 1515EST 0 0 ? ? Thunderstorm Winds
E of Maysville, Jones County Pembroke,	03   1540EST	Greenville, Pitt County	10 1530EST 0 0 3 0 Thunderstorm Winds
Robeson County Belmont, Mt. Holly,	03 1750EST 0 0 4 0 Thunderstorm	3 S Brinkleyville, Halifax County Kenly, Johnston	10 1610EST 0 0 ? ? Thunderstorm Winds
McAdenville; Baston County	Winds	County Farmville, Pitt	10
Western Mecklenburg County	03 1810EST 0 0 3 0 Thunderstorm Winds	County 5 S Mount Airy,	10   1630EST
SE Charlotte, Mecklenburg County Pineville,	03	Surry County 5 W Tarboro,	
Mecklenburg County Indian Trail, Union County	03 1850EST 0 0 0 ? Hail (0.75)	Edgecombe County	Winds A severe thunderstorm developed over Cary and blew down limbs and damaged a railroad crossing gate. A number of trees and
	The first report of severe weather was at Hubert in Dislow		Dower lines were blown down at Louisburg in Franklin County. The wind blew out windows in stores and blew down power lines at Greenville in Pitt County. A 1/4 mile long swath of trees was
	County where trees were uprooted. Power outages were reported at many locations across Onslow County. At Gibson in Scotland County, trees and television antennas were blown down. Trees		blown onto a car at Kenly in Johnston County, A barn was blown onto a car at Kenly in Johnston County, A barn was
	were blown down east of Maysuille along Righway 58, and a severe storm affected the town of Pembroke in Robeson County. Here, a	1	destroyed by winds at Farmville, and trees were blown down 5 miles west of Tarboro. Perhaps the most damage was in Surry County.
	man was slightly injured when a power pole was blown across his car, partofaschool's roof was torn off, a dormitory at Pembroke		from the Holly Springs community (5 south of Mount Airy) to the Westfield area. A building used as a church was almost
L .	State was damaged, and many trees and power lines were blown		destroyed by wind, and part of a trailer was severely damaged.  A child was cut badly when a storm door blew in at a house.

PLACE	TTIME - LOCAL STANDARD - CHARGES OF THE CHOCAL STANDARD - COAL STANDARD - CHARGES OF THE CHARGES	V V PERSONS D	AUGUST 19  TIMATED  AMAGE  CHARACTER  OF  STORM
NORTH	CAROLINA	NORTH CAROLINA	* * .
Near Wilton, Branville County	11: 1340EST 0 0 ? ? Thunderstore Winds, Hail	NC2001-002-016-017	6 Hurricane Charley
2 S Kittrell, Vance County	(0.75)  11 1345EST 0 0 ? Thunderstorm Winds	The hurricane moved rather quickly up the million in damage to property and crops,	
Central Drange County	11 1415EST 0 0 ? ? Thunderstorm Winds	northeastern sections of the state. One Nags Head when her car was swept off the	woman was killed at road into a canal.
5 W to N of Chapel Hill, Orange County Durham, Durham	11	Most property damage resulted from high damage resulted from the combination of fields. F310	winds, while most crop
County Cleveland, Rowan	Winds, Lightning 11 1529EST 0 0 0 0 Thunderstorm	Rutherford, Polk, 17 1215EST 0 0 ? Henderson, Buncombe 1830EST	? Flash Flood
County Ingleside, Franklin	11 1540EST	Counties	
County S of Bobbitt, Franklin County	11 1600EST 0 0 ? ? Thunderstorm	3 to 5 inches of rain fell in parts of the small stream and urban flooding in the al	
Chapel Hill, Grange County	11 1730EST 0 0 5 0 Thunderstorm	Raleigh, Wake County 18 2015EST 0 0 5	0 Flash Flood
Eastern Wayne County	11 1730EST 0 0 3 0 Thunderstorm Winds	Several cars were damaged and some busin damage when an estimated 5 inches of rain	n fell in the northern
Raleigh, Wake County Castoria, Greene	11	parts of Raleigh in about a 2 hour perior  New Bern & Havelock, 19 0630EST- 0 0 ?	
County Farmville, Pitt	11   1900EST	Craven County 0900EST Wilmington, New 19 0700EST 0 0 4	? Flash Flood  0 Flash Flood
County Near Elevation;	Winds   11	Hanover County Jones County 19 0900EST 0 0 ?	
Johnston County	Winds	Rather unusual flooding occurred in parts	s of southeastern North
	A severe storm developed in the northeast Piedmont and produc large hail near Wilton in Granville County. Trees were blown acrossingads in the same area. Similar damage was reported n	rain in a few hours. Most severe was uni	ban flooding in
	Kittrell in Vance County. One of the most severe storms of t season developed quickly in Orange County in mid afternoon wh	reported because of water covering the re	pads.
	trees were blown across roads between Hillsborough and Chapel Hill. As the storm moved across the county, it gained streng		0 Flood
	and blew down numerous trees and some power lines in the Chap Hill area. A van was blown off the road north of town. This storm produced the most damage, however, as it accelerated in	Durham, Durham 20 1041EST 0 0 5	0 Flash Flood 0 Flash Flood
	burham County. According to some residents, the city of Durh experienced the worst thunderstorm in over 30 years. Damage	5 E Benson, Johnston 20 1110EST 0 0 4	? Thunderstorm Winds
	far more widespread than damage from the tornado in April of 1984. Windows were blown out of cars in the downtown area, a	1-1/2 SE GSB, Wayne 20 1156EST 1 25 0 0 5	0 Tornado (F2)
	numerous trees were blown down across the city. Some houses were virtually destroyed by falling trees. One woman died wh		Winds
	she tried to exit her car, which had become entangled in powe lines blown down in the storm. More than 30,000 residents we without power, some for more than 24 hours. Lightning was ai		Winds
	severe, and was responsible for the death of a girl playing under a tree just before the brunt of the storm hit. 5 peopl	County	•
	at the same location were injured by the same stroke. An isolated storm in Rowan County blew down a few trees at	ampton County Tide Cross, Bertie 20 1345EST Short 15 0 0 0	Winds ) 0 Tornado (FO)
	Cleveland. In Franklin County, the storms that affected Durh produced large hail at Ingleside, and blew down trees near Bobbitt. Storms were resoonsible for quite a bit damage (tre		
	and power lines blown down) in the eastern part of Wayne Coun and also in Pitt County, where trees were blown onto buildings	heavy rain over saturated ground in cent	ral sections of the
	Farmwille. Quite a bit of damage was reported from Castoria Greene County. Numerous trees and power lines were blown down	homes in Pinehurst and Taylortown. The Buffalo Creeks overflowed their banks in	Little Buffalo and Sanford,causing
•	there. A second severe storm hit Chapel Hill, and damage in Orange County was worse than from the earlier storm. Power	problems there. Quite a few cars were f From 3 to 8 inches of rain fell in about	3 hours as
	lines west of town were blown down.by winds estimated at more than 80 mph, and of course most damage in town resulted from trees falling onto cars, buildings, and power lines. This are	thunderstorms formed rapidly and moved a Durham and Raleigh areas. Under floodin Durham. 30 streets were closed by the w	ig became quite severe in
	of storms moved into the Wake County area. The city of Raleig experienced a very severe storm. Trees were blown down at 20	floated. In Raleigh, Crabtree Creek flo	oded causing the worst
• • • •	locations in the city, and some homes and businesses were damaged by the wind. This storm moved slowly across the city.	businesses were flooded, and about 20 ca water. Other creeks also flooded, and f	looding was reported
	and produced damage from about 1800EST to 1840EST. Lightning F70, Wind F25V.	from Cary, Fuguay-Varina, and Garner - a of the storms became severe. High winds outbuildings and power lines as a storm	tore down some
Pamilico Sound, Hyde & Dare Counties	12 1230EST 0 0 0 Waterspouts	County An intense storm produced a sma Seymour-Johnson AFB. This storm tore th	ill tornado near e roof off a house, and
Sanford, Lee County	12 1745EST 0 0 . 5 0 Flash Flood	severely damaged several mobile homes in Businesses in the same area were also da	a sales lot. maged by the storm. In
	6 to 8 waterspouts were reported in the sound. No boats were damaged, but some were close to the action. At Sanford, rainfall of 5 to 7 inches (unofficial) in a short period of ti	the eastern part of Wayne County, power the wind. Similar storms damaged sheds	lines were torn down by and power lines near
	caused Buffalo Creek to go out of its banks flooding some home vehicles, and businesses. A funeral home apparently suffered		
Emerald Isle,	the most damage.  13 0850EST 0 0 0 0 Waterspouts	Grassy Creek, 22 2300EST 0 0 4 Ashe County	? Flash Flood
Carteret County		A sudden deluge of 5 inches of rain wash	
Core Sound,	Waterspouts were observed over the ocean south of the area.  16 1230EST 0 0 0 0 Waterspout	down fences and flattened crops near the	virginia iones
Carteret County			
	A waterspout was observed by the public.		
			N.

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		9	F PATH	4 %	PER	SONS	DAN	AGE	CHARACTER	1			8	PATH	A T	PERS	ONS	DAMAC	SE	CHARACTE	R
PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF (MILES)	WIDTH OF PATH (YARDS)	KILLED .	INJURED	PROPERTY	CROPS	OF STORM	i	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF	WIDTH OF PATH (YARDS)	מוררפס	INJURED	PROPERTY	CROPS	OF STORM	
NORTH	CAR	OLINA								Ī	33 OH10			•			-				
Hillsborough & Orange Grove,	27	1419EST			0 .	0	?	0	Thunderstorm Winds, Hail		Trumbull County	'	1438EST			0	0	3	0	Hail (1.0)	,
Drange County 3 N Durham, Durham County	27	1435EST			0	0	. ?	0 .	(0.75) Thunderstorm Winds				kle-sized	haili	occurrea	1 <b>n</b> Br	1.STO 0	iville.	0	Thunderstorm	1.1 f e
Saxapahaw, Alamance County	27	1500EST			0	0 .	3	0	Thunderstorm,		Clermont County	'	1340EST hundersto	m fel	led tree	-		ia.	Ū	mander s com	W 11
Siler City, Chatham County	27	1504EST			0	0,	3 -	0.	Thunderstorm · · · · · · · · · · · · · · · · · · ·		Mahoning County		1425EST			0	0	`4 ·	. 0	Thunderstorm	Wi
Durham and Durham	27	1505EST			0	0	4	0	(1.50) Thunderstorm				hundersto		pled sev	eral t	rees	near			•
County Clayton, Johnston County	27	1700EST			0	0	.0	.0, _	Winds Hail (1.75)		Columbiana County		rdman. 2045ÉST			0	0	4	0	Hail (1.75)	
Near Selma, Johnston County	.27	1710EST		• • •	0	0	3	0	Thunderstorm Winds	1	corambrana councy	1	fball size	d hai	1 droppe			eville.	·	,	
Clinton Area, Sampson County	27	1800EST		•	0	0 .	?	0,	Thunderstorm Winds		Monroe County	07	1920EST	•			. 0	4 .	٥	Thunderstorm	Wi
									e County, but ne-sized hail		elektrika di kalendaria di	A t	hundersto ations in	m kno	cked ove	r tree	s at	scatte	red	•	
* * * * * * * * * * * * * * * * * * *	was (	observed n	near Hi	11 sbord	ough,	and tr	ees a	and pou	wer lines were ed damage of a		Henry County	10	" 1227EST	the t		0	-0	3	0	Hail (,75)	
	simi' where	lar nature e trees an	e in Al nd powe	amance r lines	Count s were	y. Th blown	ne sto n down	orms mo	oved into Durham some windows				ge hail f	ell on	Malinta						÷,
	size	hail was	observ	ed at 9	Siler	City i	in Cha	tham (	nd ping-pong ball County. Lown out of		Erie County	26	1445EST			.0	0	. 3	0	Thundèrstorn	Wi
	trees		nly, bo	th in J	Johnst	on Cou	inty.	Trees	s and power				hundersto es south			veral	tree	s about	3		
Durham, Durham	1	0340EST		., 2, 2	0	0		`o	Hail (1.75)		Lorain County		1455EST			0	. 0	5	0	Thunderstorn	Wi
County	An ea	arly morni near the	ing-sev South	ere thu	inders	torm p	produc	ed 00	fball-sized				hundersto al damage						truc-		
1 · · · · · · · · · · · · · · · · · · ·													nty. ,		4.						
	,		. :				. 5		.		Lorain County	26	1515EST	, <b>3</b>	440	٥.	2	6	0 .	Tornado (F2)	
									1.			tow	rnado set Lorain.	The s	torm tra	rveled	nort	heast a	wn- ind	·	
32 NORTH DAI	KOTA	, , , ,			Δ.							of I	ed off i orain. T	en fix	ed homes	were	dest	royed o			
Hettinger Co,	04	1620CST			0	ò	0	. 0	Hail (1.00)	1		eler	rely dama mentary sc ige.	ged, w hool s	uffered	varyi	nents ng de	and an grees o	f		
New England	1-11	nch hail w	as rep	orted b	эу а Н	lam rad	lio op	erato		***	Cuyahoga County		1530EST			0	0	4	0	- Thunderstorm	Win
Renville Co, 4E Sherwood	05	1235CST							Funne1				understor					ly in W	est-		•
Stutsman Co, -	05 .	1255CST	• •						Funnel		Fulton County		1830EST	· .	, and Le	0		4	0	Thunderstorm	Win
Morton Co,	13	1415CST							Funnel				understor rees at s								
Glen Ullin McIntosh Co.	13	1500CST				0			Hail (0.88)		Williams County	1	1832EST			0	0			Thunderstorm	Wir
15SW Wishek	17.	7, 1		combin	ned wi	th 2 t	:0 3 i		of rain, damaged			A ti	understor	n blew	a house	"trai	ļer o	ff its	•		
	1	land.		• •		٠.		· . ·			Defiance County	11	1900EST			0	0.7	4	o: `.	Thunderstorm	Win
Grand Forks Co, Grand Forks	` .	1801CST	of 67 m	nh was	0	0 dod at	0 the		Tstm. Wind (58) Forks airport.			Tiree	s in the			ice wei	re kn	ocked o	i.		
	The	high wind iddy field	is force	ed a ho	t air	ballo	on, a	bout t	o land, down into		Van Wert County	Ι.	thunders 1920EST	torm.			0		n	Thundo	u i
Morton Co,		1645CST			. 0	0	0		Hail (1.75)		van were county		1920EST understor	n dest	royed or	heav	.º i]v d	amaged		Thunderstorm	พาก
7NE Glen Ullin	Go1f	ball-size	d hail	was re	porte	d by 1	.aw en	forcen	ent personnel.			hous	e trailer			a fixe	d ho				
Oliver Co, 5S Center		1645CST		7	, 0	0	.0		Hail (1.75)		Paulding County	ŀ	1930EST understori	n doct	royad t	0		4 ·.	0 .	Thunderstorm	Win
Mantan Gi	ľ		d hail	was re			٠. ٠	· 1	ent personnel.		Allen County	1	2000EST	٠.	oyeu Cr	oes (i	0. dti i	ţon. 4 -	0	Thunderstorm	Win
		1700CST	O moh	damaged	0 La era	0 ain el	4°. evato	٠	Tstm. Wind (52) scattered large			A th	understor	n fell	ed sever	al tre	· -				
Morton Co, New Salem	1	bales.						:	e di minin			1	s northwe	st of :	Lima.	1					
New Salem	1				0	. 0	0	, ,0	Tstm. Wind (52)		Mercer County	] [	2005EST		nd +====	0	0 .	4		Thunderstorm	Win
New Salem	19	1733CST	٠.						1		P		nunderstor	⊪ αowπ							
New Salem Morton Co, Flasher	19 Wind	gusts to	60 արհ	ı were	report		n		Hail (0.75) 24			1010	١.			in Mo	endon	and Ro	ick-		
New Salem Morton Co,	19 Wind 19				0	. 0			Hail (0.75)		Auglaize County	1	1. 2030EST		*1	i in Mo	endon 0	and Ro		Thunderstorm	Wind
New Salem Morton Co, Flasher Burleigh Co,	19 Wind 19	gusts to			0	. 0			Hail (0.75)		Auglaize County	26 A th Wind		m topp o 79 m trong	led seve iles an Airport	0 ral to hour v	0 rees vere Vew K	4 in Unio observe noxvill	0. polis d at e.		Win
New Salem  Morton Co, Flasher  Burleigh Co,	19 Wind 19	gusts to			0	. 0			Hail (0.75)		Auglaize County	26 A th Wind	2030EST understom Is of up t Neil Arms	m topp o 79 m trong	led seve iles an Airport	0 ral to hour v	0 rees vere Vew K	4 in Unio observe noxvill	0. polis d at e.		Win
New Salem  Morton Co, Flasher  Burleigh Co,	19 Wind 19	gusts to			0	. 0			Hail (0.75)		Auglaize County	26 A th Wind	2030EST understom Is of up t Neil Arms	m topp o 79 m trong	led seve iles an Airport	0 ral to hour v	0 rees vere Vew K	4 in Unio observe noxvill	0. polis d at e.		Win

	NO. OF ESTIMATED PERSONS DAMAGE		NO. OF ESTIMATED! PERSONS DAMAGE
PLACE	STANDARD STANDARD STANDARD STANDARD CROPS STANDARD CROPS STANDARD CROPS STANDARD CROPS STANDARD CROPS STANDARD CROPS CRO	PLACE	TIME - LOCAL STANDARD
34 OKLAHOMA		Washington County	MA  08 0100 -
Wagoner County Woods County	01 1715CST 0 0 ? ? Ha11 (2.75) 01 1805CST 0 0 ? ? Ha11 (1.75)	Mashington councy	0600CST 0 0 ? ? Flash Flooding
Alfalfa County Woods County Alfalfa County Woodward County	01 1840CST 0 2 4 ? Tstm.Wind 01 1847CST 0 0 ? ? Tstm.Wind 01 1900CST 0 0 5 ? Tstm.Wind 01 1908CST 0 0 0 0 Wind		Rainfall amounts of 6 to 8 inches caused Caney Creek to flood agricultural areas and several county roads.
Grant County Grant County Kay County Garfield County Pawnee County Creek County	01 1908CST 0 0 0 0 Wind 01 1945CST 0 0 5 0 Tatm. Wind 01 2045CST 0 0 5 0 Tatm. Wind 01 2055CST 0 0 7 0 Tatm. Wind 01 2055CST 0 0 7 7 Tatm. Wind 01 2155CST 0 0 7 7 Tatm. Wind 01 2230CST 0 0 7 7 Tatm. Wind	Lincoln County Blaine County Custer County	D8 1645CST 0 0 ? ? Tstm. Wind 08 1740CST 0 0 ? ? Tstm. Wind 08 2030CST 0 0 5 ? Tstm. Wind
Ottawa County	01 2345CST 0 0 ? ? Tstm.Wind  Thunderstorms produced hail up to 3 inches in Tulsa and Wagoner Counties and winds up to 80 mph across northern sections of the		Thunderstorms produced 60 to 80 mph winds in western portions. A roof was taken off of a building in Clinton which was followed by five inches of rain. Damage to the buildings was estimated at \$50,000.
	state. Winds up to 60 mph occurred at Woodward, but were not associated with a chunderstorm. The thunderstorm winds downed trees and power lines, destroyed several barns and outbuildings, and did light damage to shingles. Part of a roof was taken off of a school in Lamont. A mobile home was destroyed near Lambert, injuring two occupants. Damage in southern Alfalfa County was	Woodward County Blaine County Major County Major County	09 1415CST 0 0 0 ? ? Tstm. Wind 0 0 1426CST 0 0 0 ? ? Hail (0.75) 0 1420CST 0 0 5 ? Hail (1.75), Tstm. Wind 0 0 150CST 0 0 ? ? Hail (1.75) Hail (1.75)
Sequoyah County	estimated at \$150,000.  02 0100CST	Garfield County Garfield County Logan County Grant County	1500ST
	A thunderstorm produced damage to trees and power lines in Sallisaw.	Garfield County Kay County Kay County Cleveland County	09
Cimarron County	02 1530CST 0.5 50 0 0 0 Tornado (FO)  A tornado touched down briefly 12 miles north-northeast of Boise	Comanche County Tulsa County Rogers County Wagoner County	09
	City. No damage occurred.		Thunderstorm produced winds of 60 to 80 mph and hail up to the size of golfballs. The winds rolled a mobile home and damaged
Hughes County Grady County	05 1600CST 0 0 ? ? Tstm. Wind 05 1650CST 0 0 ? ? Hail (0.88), Tstm. Wind		several roofs near Collinsville, with damage around \$50,000.  Damage of around \$100,000 occurred at Fairview and Ringwood in
Hughes County Stephens County Coal County	05 1700CST 0 0 ? ? Hail (1.75) 05 1710CST 0 0 5 ? Tetm. Wind 05 1730CST 0 0 4 ? Tetm. Wind, Hail (0.75)		Major County. A mobile home was destroyed along with several outbuildings and barns. Considerable hail damage occurred in Ringwood.
Comanche County Stephens County Stephens County	05 1730CST	Lincoln County .	15 1750CST 2.0 50 0 0 0 Tornado(FO)
Jefferson County Jefferson County	05 1930CST 0 0 ? ? Ha11 (0.75) 05 2000CST 0 2 5 ? Tstm. Wind  Thunderstorms produced winds up to 80 mph and scattered hail up		A weak tornado set down 61 miles north and one mile east of Chandler and touched down intermittently for 2 miles. No damage occurred. It was described as a small, rope-type tornado.
	to the size of golfballs across southwestern and southeastern sections. The winds destroyed several outbuildings and barns, and downed many trees, power poles and lines. Two mobile homes were destroyed a few miles west of Comanche and several barns were destruent March with damage estimated at \$65,000. Damage of \$25,000	yedCimarron County	20 1800CST 0 0 ? ? Hail (1.00) A thunderstorm produced hail and very heavy rain near the
	was done to a barn near Centrahoma. Damage of \$45,000 was done to a TV tower and a barn near Sterling. A boat marine was damaged at Waurika Lake. Fourteen travel trailers were destroyed, as were	2 Cimarron County	Texas line south of Boise City. 22 1800- 0 0 ? ? Flooding
	to 15 boats. Damage was estimated at \$250,000. One woman had a serious leg injury and one boy had a broken arm. They were both in a camper trailer.		2200CST  Rainfall of four to six inches in a few hours caused flooding
Washita County   Washita County	06 1605CST	Cimarron County	of county roads and a few buildings on a farm near Griggs.
Comanche County Cotton County Washita County Beckham County Garvin County Caddo County Greer County	06 1620CST 0 0 0 ? ? Ha11 (1.00) 06 1620CST 0 0 0 ? ? Ha11 (1.00) 06 1630CST 0 0 ? ? Ha11 (0.75) 06 1635CST 0 0 ? ? Term Wind 06 1700CST 0 0 ? ? Ha11 (1.00) 06 1730CST 0 0 ? ? Ha11 (0.75)  Term Wind 06 1745CST 0 0 ? ? Term Wind		Tstm. Wind  A thunderstorm produced hail which badly damaged fields of milo east of Boise City. Winds damaged several buildings and downed power lines. Damage is estimated at \$30,000.
Greer County	06 1800CST 0 0 ? ? Tstm Wind		
Woodward County	Thunderstorms produced winds up to 70 mph and hail up to golfball size across portions of the southwest. The wind downed power poles and trees and destroyed several outbuildings.  07 1715CST 0 0 ? ? Hail (1.00)  One inch size hail fell just northeast of Quinlan.	ORZO09-010-011-012 Baker, Gilliam, Grant, Harney, Lake, Malheur, Umatilla, Union and Wallowa	10- 17  Frequent lightning storms across the eastern half of eastern Oregon during the second week of August produced numerous forest fitres. Hundreds of thousands of screes of forest and range lands
Osage County	07 2030CST	Counties	were burned. Damage estimates are in excess of 6 million dollars.
-300 0001107	Winds up to 70 mph downed trees which blocked a highway just west of Skiatook.	Malheur County, Harper area	22 1600PST O ? ? Plash Flood and Hail Two to four inches of hail fell in and around Harper, or in northern Malheur County. This produced some flash flooding on the Malheur River near Harper.
Washington County	08 0030CST 0 0 ? ? Hail (1.75)		
	Colfball size hail fell in southeastern Eartlesville.		

PLACE	TIME - LOCAL STANDARD LENGTH OF PATH LENGTH OF PATH MIDTH OF PATH (TARDS) WILED WILED WILED CROPS CROP	DATE  LENGTH OF PATH  LENGTH OF PATH  CARDS  MIDTH OF PATH  (VARDS)  MIDTH OF PATH  (VARDS)  CHARACTER  OL  STANDARD  CHARACTER  OL  STOWN  CHARACTER  CHARACTER  OL  STOWN  CHARACTER  CHARACTER  CHARACTER  CHARACTER  CHARACTER  CHARACTER  CHARACTER  OL  STOWN  CHARACTER  CHA
36 PENNSYLVA	NIA, Eastern	PENNSYLVANIA, Eastern
Columbia County, Millville Schuylkill County: Tamaqua Tamaqua Mongomery County, Hatfield	01 1715EST 0 0 ? 0 Hail (1.50-2.00) 01 1815EST 0 0 4 0 Lightning 01 1900EST 0 0 3 0 Lightning 01 2100EST 0 0 4 0 Lightning	Juniata County, McAlistenville  06 1425EST 0 0 3 0 TSTM Winds  Thunderstorm wind gusts downed trees in McAlistenville, Juniata County. Wind gusts also demolished a shed on a farm in Montour Township, Columbia County, to the west of Bloomsburg.
York County, Strinestown Lancaster County, Lancaster Berks County, Temple Lehigh County: Hosensack 1 N Macungie Berks County, Stowe Northampton County, Hellertown Cumberland County, Wettzville Luzerne County, Beach Haven  Luzerne County, Brightstown Perry County, New Bloomfield Lancaster County, Ronks Perry County, Now Bloomfield Lancaster County, Ronks Perry County, Louncannon Dauphin' County, Harrisburg (Center City) Cumberland County, Enola	Intense thunderstorms over the Blocosburg-Catawissa area of Columbia County produced hail up to 2 inches in disaseter and heavy rain. The heavy rain caused once minor mud clides, Gusty winds with the thunderstorms brought doom some tree limbs and blav over a metal utility abed. Lightning caused a fire which damaged the roof and third floor of a hotel in the Park Creat area of Ryan Township near Tamaqua. Lightning caused a fire and some damage to a large 3-story chicken house in West Pean Township near Tamaqua. Lightning caused a fire which resulted in the death of an 82 year old woman in Batfield, Montgomery County.  02 1230EST 0 0 7 9 Hail (1.00)  03 1235EST 0 0 7 9 Hail (1.75)  04 140EST 0 7 7 Hail (1.75)  05 140EST 0 7 7 Hail (1.75)  06 140EST 0 7 8 Hail (1.75)  07 1455EST 0 8 7 9 Hail (1.75)  08 1455EST 0 8 7 9 Hail (1.75)  09 1530EST 0 8 4 0 Lightning  10 1655EST 0 8 1 Lightning  10 1655EST 0 8 1 Lightning  10 1655EST 0 8 1 Lightning  11 Tounderstorms caused beavy downpours over northern York County, western Lebanon and Lancaster Counties and southern Bauphin County. The downpours caused considerable drainage Flooding. In York County, up to three feet of water accumulated in some parking lots and yards. The weight of water caused a portion of a supermarket roof to collapse in Weightedtown, York County. Thunderstorm wind guates to 69 MH weer recorded at Lancaster Afropri around 2 PM DDT. Wind guats for the tops out of frees, took the roof off a house and blew windows out in Stoueln West Portugoree Township, Montgomery County. Across the river in Union Township, Berize County, Leptes of roof and siding were blown off a barn. Ball 1 inch in diameter feel near Temple in Berks Journal and Stoueln West Portugoree Township, Montgomery County. Across the river in Union Township, Berks County process of roof and siding were blown of a barn. Ball 1 inch in diameter feel near Temple in Berks Journal of String Winder County	Perry County: Lickeburg Newport Newport Newport Newport Newport Clarks Ferry Clarks Ferry Clarks Ferry County, Learning Competition Dauphin County Competition Dauphin County Newport Dauphin County New Holland

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PLACE	TIME - LOCAL STANDARD - LOCAL	PLACE	TIME - LOCAL STANDARD CROPS RILLED WIDTH OF PATH (ARCS) CROPS CROP
36 PENNSYLVA	NIA, Western	PENNSY	LVANIA, Western
Indiana County	01 1330EST 0 0 4 0 Lightning A Johnsonburg cable TV antenna was struck by lightning.	McKean County	23 1430EST 0 0 0 0 Thunderstorm Wind Trees were downed in Otto Township.
Butler County	01 1650EST 0 0 5 0 Thunderstorm Wind Trees and power lines were downed in Slippery Rock and West Sunbury. A tree fell through a house in Slippery Rock Park. A house trailer was also crushed by a tree in Slippery Rock.	Butler County	23 1505EST 0 0 0 0 Thunderstorm Wind Wind gusts of 58 knots occurred in Cramberry Township (14 miles southwest of Butler).
Beaver County	06 1400EST 0 0 0 0 Hail (1.00) Quarter size hail fell in Raccoon State Park.	Allegheny County	23 1505- 0 0 0 0 Thunderstorm Wind . 1530EST  Trees were downed in Marshall Township (16 miles northwest of
Allegheny County	06 1500- 0 0 7 0 Thunderstorm Wind, 1630EST Hail (1.00)		Allison Park), and also in Climerville. A wind gust up to 52 knots ( occurred at the Greater Pittsburgh Airport at 1505EST.  23 1540EST 0 0 3 0 Lightning
.•	Power lines were downed and trees uprooted in West Mifflin, Homestead, North Side, West End, Creentree, NeKees Rocks, Moon Township, Penn Hills, Wilkinsburg, Castle Shannon, and Mt. Lebanon. Buildings were damaged in downtown Pittsburgh, including a 40-foor section of roof edging on the Pittsburgh Press and Post Gazette	Armstrong County  McKean County	23 1540EST 0 0 3 0 Lightning A school was struck by lightning in the southern part of the county.  23 1700EST 0 0 0 0 Thunderstorm Wind
	building and windows that were broken in downtown department stores. A trailer was blown over under the Ft. Duquesne Bridge. A roof was blown off a hangar at the Greater Pittsburgh Airport, as were doors and windows of two other hangars. Several car windows and four skylights were also blown out at the airport. At 1505EST, one inch diameter hail was reported at the Air National Courd near the airport, and at 155EST, Bridgeville reported 3/4 inch hail. Telephone poles were downed in Harmarville at 1630EST.	Westmoreland County	Trees and power lines were downed in Eldred and Bradford.  23 1803EST 0 0 4 0 Lightning A Murrysville barn was struck by lightning.
Westmoreland County	06 1654- 0 0 0 0 Thunderstorm Wind, 1710EST Hail (1.75) Trees were downed in Trafford at 1654EST. Colfball size hail occurred at Murrysville at 1710EST.	37 RHODE ISLA	,
Fayette County	06 1800EST 0 0 3 0 Lightning A commercial building in Connellsville was hit by lightning, knocking several bricks loose and damaging two circuit breakers.	Providence County, Cumberland	07 1530EST- 0.5 100 0 0 5 0 Tornado (F1) 1540EST A tornado touched down in the Cumberland Hill section of Cumberland in northeastern Rhode Island. The tornado moved in a northwest to southeast direction, shearing off several trees at about the
Mercer County	06 2230EST 0 0 4 0 Lightning A house in Brookfield was struck by lightning, setting the attic and roof ablaze.	,	thirty foot level before touching down. Some homes experienced structural damage and an unfinished condo project suffered extensive loss of plywood. Nost of the damage was to trees and power lines. The occurrence of this tornado was confirmed by National Weather Service investigation.
Westmoreland County	07 1450EST 0 0 0 0 Thunderstorm Winds Trees were downed in Penn Township, 10 miles northeast of Greens-	Providence County, Cranston and South Providence city	07 1615EST- 4.0 200- 0 20 6 0 Tornado (F2) 1625EST 400  The second tornado to occur within an hour in the county touched
Armstrong County	07 1455EST 0 0 0 0 Thunderstorm Winds Trees and power lines were downed in Kittaning.	,	down in a portion of Cranston and moved in an east-northeasterly direction. The tornado skipped over a section of town near the intersection of Cranston and Bridgham streets before touching down again on Broad Street in South Providence. A van was tipped over in Cranston and a house moved off its foundation. This tornado
Jefferson County	07 1515- 0 0 3 0 Thunderstorm Winds 1615EST  The front porch of a trailer was ripped away and trees and power lines were downed in Punxsutawney.		caused considerable damage to structures including homes in Cranston and buildings in South Providence. A very rare event in Rhode Island, the twister resulted in millions of dollars of property damage, twenty injuries, and very fortunately, no deaths. The injuries were caused mostly by flying debris. In South Providence a building completely lost its fourth floor. Parts of that area re-
Clearfield County	07 1620EST 0 0 0 0 Thunderstorm Wind Trees were downed in Curwensville in the western part of the county.		embled a "war zone" after the storm. Plate glass windows were blown out of many buildings including a fast food restaurant. This tormado was easily confirmed by eyevithess accounts and by live media coverage. Up to 6,000 electric customers lost power.
Butler County	10 1530EST 0 0 3 0 Lightning Lightning struck a trailer in Harrisville.	Providence County	07 Late afternoon 0 0 4 0 Lightning, Heavy Rain, Flooding
Clearfield County	10 1600EST 0 0 5 0 Lightning A barn in Grambian was struck by lightning and set ablaze.		Heavy thunderstorms accompanying the tornadoes brought a mamber of lightning strikes along with torrential rains which flooded many streets, and in Pawtucket, caused part of a street to collapse. Heavy street flooding was reported from Lincoln and Central Falls. Two to four inches of rainfall were received in the area of flooding.
Butler County	15 1420EST 0 0 0 0 Thunderstorm Winds Trees and power lines were downed in Center and Oakland Townships (4 miles north of Butler).	Providence County, Burrillville and North Smithfield	OB 1015EST- 6,0 200- 0 0 5 0 Tornado (F1) 1025EST 400
Erie County	15 1800- 0 1 5 0 Thunderstorm Wind, 2045EST Lightning Trees were downed in Meadville, one falling into a house and injuring an occupant. Trees and power lines were also downed in Vernon and Cambridge. A home was struck by lightning in Materford Township at 1930EST. At 2019EST, a Corry commercial building power line was struck, destroying phone lines and a fire alarm system.		The third tormado to strike the state and the county in two days touched down in Burrillville near the Milson Reservoir. The tormado moved along an intermittent path toward the east-northeast and then turned northeast as it entered Morth Smithfield. Then, it crosses the northwest corner of North Smithfield into Killville, Na. The intermittent touchdowns of this storm were influenced by the rolling terrain. Many large trees were lifted out of the ground along its path and houses damaged along about one and a half miles of the track. Right cars, a trailer, and several buildings suffered damage in Slatersville (North Smithfield). This tormado was confirmed by National Weather Service investiga-
Venango County	15 2145EST 0 0 3 0 Thunderstorm Wind Trees were downed and an awning was ripped from a house in Victory Heights.	Providence County,	OS Late morning 0 1 0 0 Lightning
Butler County	15 2330- 0 0 0 0 Thunderstorm Wind 2345EST  Trees were downed in Center Township, and also in Portersville at 2345EST. Power lines were downed in Lancaster Township (10 miles		A man was injured by a bolt of lightning while carrying a metal crate on a farm. He was thrown about five feet. He was treated and released at a local hospital.
	west of Burler).		

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	PLACE	PATE  TTME - LOCAL STANDARD LENGTH OF PATH (MILLES) WIDTH OF PATH (MILLED) WIDTH OF PATH (MILLED) WOOPERTY CROPS C	PLACE	DATE  TIME - LOCAL STANDARD LENGTH OF PATH (VAROS) WILLED MIDURED PROPERTY CROPS CRO
1	RHODE	SLAND	—— south o	CAROLINA
	Providence County, Slatersville	O8 Late morning 0 0 0 4 Large Hail (0.75)  Large hail which occurred with the passage of a severe thunder- storm and tormado heavily damaged an apple crop at a local or- chard.	SCZ007-008 S.C. Coast	15 1600EST 0 0 2 0 Tropical Storm Tropical Storm Charley formed in a depression off the South Carolina Coatt. Charley stayed 140 miles offshore for 2 days before drifting north-northeast. Street flooding occurred in Charleston at high tide. The Northeast coastal area received beneficial rains. No damage was reported.
	Statewide	24 All day 0 1 4 0 High Winds  Strong and gusty winds reaching over LO MPH at times toppled trees and broke branches, resulting in scattered power outages. In Providence, a boy was injured by an airborne piece of plywood, An auto was crushed by a falling tree.	Spartanburg County, Upper part of County	17 1600EST 0 0 4 0 Flash Flooding Eight inches of rain within 24 hours flooded streets with water up to 2 ft deep on SC 14. There was considerable damage to roads near Landrum.
		at also also stabiled by a fairfulg steel.	Newberry County,	Flash flooding caused by more than 10 inches of rain within six hours caused record flooding along Scotts Creek in Newberry, About 40 homes
	38 SOUTH CAR	DLINA		were flooded with water up to 10 reet age in some homes. Hajor streets were barricaded with flood waters want deep on some streets. Flooding began at 3 s.m. and continued during the torning of the torn
	Berkeley County, Bonneau	1 1725EST 0 0 0 Hail (0.75) Hail occurred near Bonneau.	Sumter County, North Sumter	18 1430EST 0 0 2 0 Thunderstorm winds Thunderstorm winds Thunderstorm winds downed trees and power lines in North Sumter.
	Berkeley County, Ladson, near Bonneau	I 1930EST Winds blev a tree on s mobile home Hail (1.0) in Ladson. A woman and dog were killed, 3 people injured. (7.33M) Hail fell hear Carnes Crossroads.	Lexington County, Lexington and West Columbia	18-19 Heavy rain washed out bridges and also caused extensive urban flooding. A deputy sheriff drove his car into a flooded area near Lexington and was drowned.
		1 2000EST 0 0 4 0 Lightning A lightning-caused fire burned a woman to death in Ridgeville just off 1-26 north of Charleston (F 86M).	Richland County, Columbia	18-19 0500EST 00 4 0 Flash Flooding Beavy raine began on the 18th and continued through early morning of the 19th. Widespread Flash flooding occurred in the Columbia area. Several homes on Arcadia Lake were flooded.
	Charleston County, Charleston Airport	1 2002EST 0 0 3 0 Thunderstorm winds, A plane was damaged after its moorings failed during strong winds.	Florence County, Florence	19 1600EST 0 0 2 0 Urban Flooding fleavy rain of 2 to 3 inches flooded city streets, disrupting traffic in Florence.
	Lexington County, West Columbia Spartanburg County,	2 1421EST 0 0 4 0 Lightning A direct hit om a radio tower (WSCQ-FM) by Hightning knocked the station out for 37 hours. 2 1645 pcr 0 0 3 0 Thunderstorm winds,	York County, Western York County	9 2023EST 0 0 6 2 Flash Flooding Streets in Wooded Valley were flooded with 6 to 8 ft. water. 25-10 residents were evacuated. About 30 homes were flooded with water up to
Ì	Spartanburg to Pacolet	2 1645EST 0 3 0 Thunderstorm winds, Wind, and heil, blew down numerous trees and six Heil (2.50) power lines and caused other damage from north.  Spertenburg to Pacolet.		ft. deep in some homes. At least 23 bridges and culverts were washed out in western York County.
	York County, Rockhill, Port Mill and York	3 DOLBEST 0 0 4 0 Thunderstorm winds Intunderstorm winds caused considerable damage to trees and utilities in Rock Hill, Fort Hill, and York.	Union County, Lockhart	19-20 2050EST 0 6 3 Flash Flooding Heavy rain at Lockhart caused heavy float flooding. One person was drowned when his car went out of control and wrecked in a 15 ft. water-filled gully. Thirty-five homes.
1	Chesterfield County, 4 miles West of Cheraw	1 1430EST 0 0 4 0 Thunderstorm winds Thunderstorm winds ripped a roof off a hanger and damaged a mobile home at Cherav Airport		water-filled gully. Thirty-five homes, 2 businesses, 3 churches, a post office, and many streets flooded. 75 people evacuated. (M25 V)
. ]	Darlington County, Lamar	four miles west of Cheraw. 3 1715EST 0 2 0 Thunderstorm winds Wind blew a tree on mobile home, causing considerable damage.	Chester County	19-20 2130EST 0 0 4 0 Flash Flooding Recay rains washed out bridges, stranding everal families. 22 1800EST 0 0 5 0 Flooding
	Spartanburg County, Little Chicago	J 7800EST 0 0 4 0 Lightning Lightning burned a residence at Little Chicago in northern Spartanburg County.	Chester	Heavy rains caused considerable flooding in and near Chester.  22 1945EST 0 0 5 0 Flooding
	Sumter County, Sumter	4 P.M. 0 0 4 0 Lightning Lightning struck a home in Sumter, setting it aftre.	I	Heavy rains caused flooding up to 10 inches deep in several businesses and parking lots in the watson Shopping Center of North Myrtle Beach.
	Charleston County, Riawah Island	4 2100EST 0 0 2 0 Lightning Lightning knocked a hole in the roof of a home on Kiswah Island.	Berkeley County, Caromi area	lightning set a home afire in the College Park subdivision of the Caromi area of Berkeley County.
	Spartanburg County, Northern part of County		Charleston County, Charleston	25 0300EST 0 0 3 4 Lightning Lightning caused extensive damage to four apartments at 102 Royal Palm Building in Charleston.
	Chester County, Chester	In northern Spartanburg County, heavy rains and winds caused widespread minor damage. Power was disrupted to more than 1,000 customers.  6. 1615EST 0 0 4 0 Lightning Lightning set a home afire in Chester.	SCZ001-002-003-004 -005-006-007-008	1-31 0 ? ? Drought Heavier than normal rainfall provided substantial relief from the drought. Subsolls still need additional moisture. Alao, nost streams and reservoirs are still
	Lee County, 4 Miles SSE Bishopville	6 1645 EST 0 0 4 0 Thunderstorm winds wind blew down several large oak trees, tore the roof off a house, and damaged farm equipment.		below normal elevations.
	Aiken County	6 1730EST 0 0 2 0 Thunderstorm winds, Thunderstorm wind caused numerous power and bone outages in Aiken, South Carolina. One bone was heavily damaged by fire following a lightning strike.		
	Spartanburg County, Boiling Springs	7 1800EST 0 0 4 0 Thunderstorm winds Gore Road near Boiling Springs.	39 SOUTH DAK	
	Spartanburg County, Landrum	8 1710 EST destroys the stress of the stress and power line, heavily damaged one home, and caused minor damage to several others. One pergon was slightly injured. Several mobile homes	Fall River County  Hutchinson County	A funnel cloud was sighted just northwest of Edgemont.
	Greenwood County,	were damaged in Solling Springs.		One inch diameter hail fell ten miles west of Freeman.
	Greenwood York County.	Thunderstorm winds broke limbs, disrupting power in Greenwood. Several trees fell on homes.  11 1600EST 0 0 4 0 Lightning	Deuel County	01 1635- 0 0 0 4 Hail 1650 CST
	Rock Hill Kichland County.	Lightning set a 57 year old classroom on the Winthrop Campus afire.  12 0700EST 0 0 5 0 Flash Flooding		Hail of unknown size fell southwest of Toronto in a path four miles long and three miles wide. The hail
	Columbia	Water from Gills Creek following more than 4 inches of rain flooded the Sandhill Academy on 4335 Timberland Drive.	Fall River County	completely destroyed crops within that area.
	Charleston County, Charleston	14 0930EST 0 0 3 0 Flooding 44-5" rains caused street flooding and numerous traffic accidents, disrupting traffic aepecially at Silas Pearman Bridge. Up to 5 miles of stalled traffic collected on the Interstate Highway.		Three-quarter inch diameter hail fell in Hot Springs.
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PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (YAROS) WIDTH OF PATH (YAROS) WIDTH OF PATH (YAROS) RILLED PROPERTY CROPS CROPS RILLED PROPERTY (YAROS) STOUM CONTROL OF CROPS CROP	PLACE	DATE  TIME - LOCAL  LENGTH OF PATH  WIDTH OF PATH  (YARDS)  CROPS  RILLED  WO OL  STANDARD  CROPS  C
SOUTH D	PAKOTA	SOUTH D	DAKOTA
Tripp County  Meade County	03 1825 CST	Gregory County	06 1730 CST  0 0 3 0 Thunderstorm Winds 06 1800 CST  0 0 0 0 0 Funnel Cloud 06 1830- 0 0 0 0 Hail (4.50) 1930 CST  Thunderstorm winds destroyed calf shelters and feeders near Kennebec. Small buildings were also blown over. A funnel cloud was sighted north of Kennebec. Hail, ranging in size up to four and one-half inches in diameter fell twenty miles south of Kennebec at 1830 CST and moved to the extreme southern part of the county at 1930 CST. The hail broke windows and windshields and damaged vehicles.  06 1930-  00 0 3 Hail (1.75)  2000 CST  One and three-quarter inch diameter hail fell near White River and caused some crop damage.  06 1942 CST  0 0 0 0 Funnel Cloud 06 2020 CST  A funnel cloud was sighted five miles north of Dixon. Hail of unknown size damaged crops in the
Haakon County	southwest of Maurine, Thunderstorm winds broke six power poles four miles southwest of Maurine, and three power poles near Opal.  04 1645 CST 0 0 0 0 Hail (0.75)		southwest part of county and some fields were totally destroyed. The hail also broke several windows in the area.  06 1950 CST 0 0 4 0 Lightning
Butte County	Three-quarter inch diameter hail fell ten miles north of Philip.  04 1657 CST 0 0 0 0 Funnel Cloud		Lightning struck and set fire to a vacant house ten miles northwest of Huron. The lightning-started fire destroyed the house.
	A funnel cloud was sighted six miles southwest of Nisland	,	I@6         1950-         0         0         6         4         Thunderstorm           1         2008 CST         Winds
Bon Homme County	06 1530 CST 0 0 2 0 Lightning Lightning knocked out power for a short time over a part of Springfield. A radio antenna was destroyed and telephone equipment in town was damaged by the lightning.		06 2000- 0 0 0 4 Hail 2015 CST 0 0 4 Thunderstorm Winds Q6 2015 CST 0 0 0 0 Funnel Cloud Thunderstorm winds gusted to 90 MPH in the Winner
Walworth County  Campbell County	06 1600 15 40 0 0 2 0 Tornado (F1) 1614 CST 06 1600 0 0 2 5 Thunderstorm 1630 CST 0 0 0 2 5 Thunderstorm Winds  A tornado was on the ground for a short time from 3.5 miles northeast of Akaska to two miles northeast of Akaska. The tornado knocked down some power lines. Strong thunderstorm winds caused crop damage to about half of the farms in the county.  06 1600 CST 0 0 3 0 Lightning		area, damaging 200 houses. Twelve of the houses received major damage. The Tripp County Historical Museum was destroyed as was a large shop just northeast of Winner. Several power poles were bolown over and power was out in the area for five hours. Many trees were uprooted and a plane was flipped over at the airport. One inch diameter hail fell in Witten and hail of unknown size caused crop damage in the southeastern part of the county. One mile south of Colome, thunderstorm winds uprooted trees and destroyed a five thousand bushel drying bin and a chicken house. A funnel cloud was sighted one and one-half miles south of Colome.
	Lightning started a hay fire near Mound City, destroying twenty tons of hay.	Todd and Tripp Counties	09 1253- 0 0 0 0 Funnel 1400 CST Clouds
Potter County	06 1600 CST		A funnel cloud was reported five miles south of Mission at 1253 CST. At 1305 CST, funnel clouds were observed over the northwest and southwest parts of Tripp County. Between 1300 and 1400 CST, numerous funnel clouds were sighted in western Tripp County.
	Dne and three-quarter inch diameter hail fell in the northwest corner of the county at 1600 CST and twenty miles northwest of Bettysburg at 1625 CST. The hail damaged buildings, vehicles and many crops. Thunderstorm winds blew down five power poles, leaving the city of Hoven without power for ten hours. One inch of rain fell in fifteen minutes west of Hoven.		09 1303 CST .5 30 0 0 2 0 Tornado (F0) A tornado touched down two miles southeast of Mission. The tornado turned over some water tanks.  29 1326 CST 0 0 0 0 Funnel Cloud A funnel cloud was reported near Frankfort.
Stanley County	06 1638 CST 0 0 0 0 Hail (1.75)  One and three-quarter inch diameter hail fell in Ft. Pierre.	Minnehaha County	09 1657 CST .3 30 0 0 0 0 Tornado (F0)   09 1659 CST .2 30 0 0 0 0 Tornado (F0)   09 1710- 0 0 0 0 Funnel   1714 CST   Clouds
Hughes County	06 1640- 0 0 0 Hail (3.50) 1646 CST 06 1708 CST 0 0 0 0 Hail (1.75)  Hail, ranging in size from two to three and one-half inches in diameter fell in Pierre batween 1640 and 1646 CST. One and three-quarter inch diameter hail fell in Pierre at 1708 CST.	Todd County	Two tornadoes touched down briefly with no damage reported. One tornado was two miles south and one mile west of Colton and the other was one mile west of Lyons. Funnel clouds were sighted two to three miles north of Colton and one-half mile south of Lyons.  12 ERY MRNG 0 0 2 0 Lightning Lightning set a stack of hay on fire near Hidden Timber.
			12 @7@@ CST @ @ 2 @ Lightning Lightning split a tree and ruined a television four and one-half miles west of Salem.

PLACE	TTME - LOCAL STANDARD LENGTH OF PATH (MILES) WIDTH OF PATH (MILES) CROPS	PLACE	TIMB - LOCAL STANDARD STANDARD STANDARD STANDARD CROPS WICH OF PATH (WILES) CHARACTER OF STANDARD CROPS CROP
—— SOUTH D	<b>Э</b> АКОТА	SOUTH I	DAKOTA
Pennington County	12 1549- 0 0 0 Heavy Rain 1609 CST	Davison County	16 2045-
	Thunderstorms produced 2.53 inches of rain in twenty minutes in downtown Rapid City. The heavy rain caused		Thunderstorm winds gusted to 60 MPH in Mt Vernon.
Perkins County	street and basement flooding.  12 1705 CST 0 0 0 0 Hail (1.75)	Mc Cook County	16 2005- 0 0 6 ? Thunderstorm 2050 CST Winds, Heavy Rain
	Hail, up to one and three-quarter inch in diameter covered the ground in Zeona.		Thunderstorm winds destroyed two buildings one mile west of Spencer. The west part of the county was the
Stanley County	12 1950 CST		worst affected with considerable tree damage. In Spencer, a house lost a roof and other buildings were damaged. Southwest of Spencer, a silo was
	A funnel cloud was sighted near Hayes. One and three- quarter inch diameter hail fell eight miles northeast of Onida.		destroyed. A corn shed and a dryer bin were destroyed one mile east of Canistota and power lines were downed in the north part of town. 70 MPH winds were recorded in Salem between 2045 and 2050 CST.
1	13 0130 CST		Spencer reported four inches of rain in a short time.
	Lightning set a grain elevator on fire in Conde, destroying it. The thirty thousand bushel elevator was one-third full when the fire started.	Hutchinson County	Winds
Deugl County	14 0300 CST 0 0 4 0 Lightning Lightning started a fire which destroyed a building	,	Thunderstorm winds destroyed a garage west of Freeman. Considerable tree damage was reported and a camper was flipped over and destroyed.
	near Clear Lake. The building held five thousand bales of hay. At a nearby farm, lightning killed six dairy	Turner County	16 2108 CST 0 0 0 Funnel Clauds
Hughes County	COWS.  16 1840- Ø Ø Ø Hail (2.75)  1845 CST		16 2135 CST
-	Hail, ranging in size from two and one-half inches to two and three-quarter inches fell in Blunt.		Funnel clouds were reported to the north and south of Parker at 2108 CST and over Hurley at 2135 CST. Thunderstorm winds gusted to 75 MPH in Viborg.
Spink County	16 1850 CST 0 0 0 4 Hail	Minnehaha County	16 2114 CST 0 0 0 0 Lightning
	Hail of unknown size caused extensive crop damage in the southwestern part of the county in the Tulare and Cottonwood Lake areas.		16 2355 CST 0 0 3 0 Thunderstorm Winds Lightning knocked out power for a time in Humboldt.
Beadle County	16 1855- Ø Ø 4 Ø Thunderstorm 1915 CST Winds		Thunderstorm winds blew over a chimney and an antenna near Wall Lake.
	Thunderstorm winds gusted to 60 MPH in Huron. The winds destroyed a storage shed northwest of Huron and downed sixteen power poles across the central part of the county. Four miles northwest of Huron, the winds uprocted trees, tipped over a trailer, and downed power	Union County	16 2227 CST 0 0 2 0 Thunderstorm Winds Thunderstorm winds knocked a large tree onto power lines, downing them in Spink and causing a short power outage.
Sanborn County	lines. 16 1925 CST 0 0 0 Thunderstorm	Spink County	17 0145 CST 0 0 3 0 Lightning
Sunborn councy	16 1900 Ø Ø Ø Heavy Rain 1930 CST		Lightning started a fire in a church in Redfield.
	Thunderstorm winds gusted to 60 MPH in Forestburg. Up to five inches of rain fell from Woonsocket	Hanson County	17 ERY MRNS . 0 0 4 0 Lightning A lightning-started fire destroyed a house in
]	north to the county line. In that area, some lowland flooding occurred.	Moody County	Emery.  17 ERY MRNS 0 0 2 0 Thunderstorm
Brule County	16 2003 CST 0 0 0 8 Funnel Cloud A funnel cloud was reported in the extreme northeast		Winds Thunderstorm winds downed branches onto a power line in Flandreau, causing a power outage over a small
Hanson County	part of the county.  16 2000- 0 0 6 ? Thunderstorm		area.
	2030 CST Winds, Heavy Rain	Minnehaha County	18 1645- Ø Ø Ø Heavy Rain 1710 CST 18 1925 CST Ø Ø Ø 2 Ø Lightning
	Thunderstorm winds gusting to 100 MPH uprooted trees and damaged buildings in the north part of the county. In Fulton, two steel bins were destroyed and the town was without power for ten hours. On several farms; barns, garages, silos and small buildings were destroyed. The worst affected area was south of Epiphany where large steel sheds were damaged and	Brown and Spink	Thunderstorms produced heavy rains which produced street flooding in the southern part of Sioux Falls. Lightning started two small fires in houses in the southern part of Sioux Falls.  19 0440 CST 0 0 4 Hail (1.00)
	a roof was blown in. Four miles north of Farmer, a barn was destroyed. Thirteen power poles were downed west of Farmer. The wind caused considerable crop damage in the northwest part of the county. North of Farmer, three barns were destroyed and there was extensive silo damage. Two garages were destroyed three miles northwest of Spencer. Two to three inches	Counties	19 0451 CST 0 0 3 ? Hail (1.75) 19 0510 CST 0 0 5 0 Hail (1.75) 19 0529 CST 0 0 3 0 Thunderstorm Winds 19 0551 CST 0 0 0 ? Hail (2.75) Hail, one inch in diameter fell three miles southwest
Miner County	of rain fell during this time around Epiphany.  16 2015 CST 0 0 3 0 Thunderstorm   Winds		of Frederick and caused major crop damage. One and three-quarter inch diameter hail fell in Westport and in Aberdeen. This hail damaged buildings and vehicles and broke windows. Two and three-quarter inch
	Thunderstorm winds caused considerable tree damage in the southwestern half of the county. The winds knocked out power for several hours in Howard and for four hours in Canova.		diameter hail fell one and one-half miles south of the Brown and Spink County line and covered the ground. Thunderstorm winds caused damage around Aberdeen.
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PLACE	TIME - LOCAL STANDARD STANDARD STANDARD STANDARD STANDARD STANDARD STANDARD (MILES) ON OP PATH (MRICES) OR OP S STANDARD OF ST	PLACE	PATE STANDARD STANDAR
——SOUTH	DAKOTA	TENNES	SSEE
Harding County	19 1600 CST	Carter County	07 1345EST
	Two men were injured by lightning while riding in a vehicle near Buffalo. Near Buffalo, a fire was started by lightning and burned a one and one-half square mile area. Another fire was started by lightning north of Buffalo and burned an area one mile long and one-quarter of a mile wide.  19 1830- 0 0 4 0 Lightning	Oliver Springs,	Lightning struck a house on Heaton Hill Road and started a fire which destroyed the dwelling and contents.  Or 1400EST 1 0 0 0 Lightning  A 59 year old male was struck and killed by lightning while he was selling produce at a flea market. He had been standing in an open produce stand with a tin roof and concrete floor, which was wet
Corson and Dewey Counties	2000 CST		from the rain. M590
	Lightning started several prairie fires in central Corson County. A prairie fire was started five miles west of Mc Intosh and burned 60 acres. Lightning also struck a radio tower near Firesteel, knocking it out of service.	Madison County	07 1430CST 0 0 3 0 Lightning 07 1430CST 0 0 0 2 0 Thunderstorm Win Lightning struck and killed several cows just east of Jackson. Thunderstorm winds felled trees in Jackson, and a car was damaged.
Campbell County	19 1920- 0 0 5 0 Thunderstorm 1945 CST Winds	Lincoln County	07 1430CST 0 0 4 0 Thunderstorm Win Violent thunderstorm winds blew down a house that was under con- struction in the Howell area, causing about \$25,000 in damage.
Walworth County	Thunderstorm winds gusted to 78 MPH in Pollock. A mobile home on the southwest edge of town was damaged and a mobile home west of Pollock was destroyed. Trees and windows were blown down in town. Several power lines were downed and Pollock was without power for six hours.  19 1945- 0 0 0 Thunderstorm	Memphis, Shelby County	Several trees were blown down as well.  07 1513CST 0 0 4 0 Lightning 07 1520CST 0 0 4 0 Thunderstorm Win Lightning struck the Sears Tower on North Watkins Street, and blew a four foot hole in the top of the building. Bricks were showered on three cars below, damaging them. Strong winds from the thunder storm blew a tree onto a house in the Midtown area near the Fair-
	1950 CST Winds Thunderstorm winds gusted to 65 MPH in Mobridge.		grounds, crushing the roof and caving in a wall. Several trees were uprooted in the eastern section of the county, and power was interrupted in many areas of Memphis.
Brown County	19 2145- 0 0 0 0 Thunderstorm 2200 CST Winds  Thunderstorm winds gusted to 65 MPH on the west	Carroll County	07 Afternoon 0 0 4 0 Lightning 07 Afternoon 0 0 3 0 Thunderstorm Win Lightning struck a barn near Atwood and the ensuing fire destroyed
Roberts County	edge of Elm Lake and to 60 MPH in Frederick.  20 EVE 0 1 4 0 Lightning		the barm and more than 3,000 bales of alfalfa hay stored inside. Strong thunderstorm winds toppled several trees throughout the couty; one tree fell onto a garage, damaging it and a truck inside.
Butte County	Lightning killed three cows and three calves on a farm one and one-half miles north of Rosholt. A man was injured while talking on the phone when the lightning struck.  25 AFTN 0 0 3 0 Lightning	Hamilton County	07 1700EST 0 1 2 0 Thunderstorm Win (52) Strong thunderstorm winds near 60 miles an hour felled trees in th Signal Mountain area. A tree limb blew onto a moving pickup truck and smashed the windshield, slightly injuring a man. Other trees and power lines were downed in Chattanooga, Riverview, and else-
	Lightning damaged windows and appliances in Newell.	Knoxville, Knox County	Where in the county.  07 1730EST 0 1 3 0 Thunderstorm Win
Haakon County Potter County	28 1110 CST 0. 0 4 0 Lightning Lightning started a fire twelve miles northwest of Philip that burned 80 acres of grassland.  31 ERY MRNG 0 0 2 0 Lightning Near Gettysburg, seven haystacks were struck by		Strong thunderstorm winds knocked down two 66,000 volt power lines that supplied electricity to Knoxville's main sewage treatment plant, disabling the plant and causing millions of gallons of raw sewage to be dumped into Fort Loudon Lake. Other power lines were downed in other areas, including the University of Tennessee, Fort Sanders, and Powell. A 27 year old male was cut severely whe strong thunderstorm winds blew him into a plate-glass window in front of a furniture store.
Haakon County	lightning and burned.  31 0710 CST 0 0 4 0 Lightning Lightning set a trailer house on fire, severely	Byrdstown, Pickett County	08 1400CST 0 0 3 0. Thunderstorm Win Thunderstorm winds downed a tree onto a house in Byrdstown, causin damage to the roof and one side of the house.
Tripp County	damaging it. 31 2120 CST 0 0 0 0 Hail (1.75)	Rutherford County	10 1630CST 0 0 5 0 Lightning 10 1630CST 0 0 4 0 Thunderstorm Win
	One and three-quarter inch diameter hail fell in Witten.		Lightning struck a house near Almaville and caused a fire which resulted in \$50,000 in damage. High winds from the thunderstorms tore the roof from a shed at a bread store in Murfreesboro, and two cars were damaged by the wind-driven debris. Two other businesses sustained wind damage, and two walls of a building under construction were blown down. Several trees were downed by the strong winds, primarily in Murfreesboro and near Smyrna.
40 TENNESSEE		Rutherford County	26 1355CST 0 0 4 0 Lightning Lightning started a fire at a house on Richland Place, and the house was extensively burned. Another lightning strike flattened
Memphis, Shelby County	A heat wave gripped the southeastern U.S. including Tennessee in latter July and the first of August. Aftermoon temperatures exceeded 100 degrees during the last 3 days of July; Memphis reached 104 degrees on July 31, and the heat stress index was near 120 degrees. In Memphis, a 30 year old male died of hyperthermia during the early morning hours of August 1st.	Blount County  English Mountain, Sevier County	an outbuilding.  27 0030EST 0 0 4 0 Lightning An automotive garage on Pea Ridge Road was struck by lightning and burned. The building and three cars inside it were destroyed.  27 0115EST 0 0 3 0 Thunderstorm Wir
Primm Springs, Hickman County	02 Morning 1 0 0 0 Heat A 68 year old female died of hyperthermia.	Device County	The second floor of a partially completed building collapsed due to strong thunderstorm winds.
Greene County	06 1200EST 0 0 4 0 Lightning Lightning struck a barn on Snapp Ferry Road near Afton, causing a fire which burned the barn to the ground. Also destroyed were 3,000 to 4,000 bales of hay and 3,000 tobacco sticks.	Shelby County	27 1700CST 0 0 3 0 Thunderstorm Win (52) Violent thunderstorm winds near 60 miles an hour toppled trees and collapsed temporary structures and concession stands on the golf course at Colonial Country Club in Countrywood, where a major golf tournament was in progress. Other trees were uprocted in the nort
Blount County	07 1300EST 0 0 3 0 Lightning Lightning killed 2 cows on a farm on McConnell Road off of 411		part of Collierville.

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PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (TAROS) WIDTH OF PATH (TAROS) WIDTH OF PATH (TAROS) WIDTH OF PATH (TAROS) WIDTH OF PATH (TAROS) CROPS	PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (YARDS) MILLED CROP 8  MILLED CROP 8  MILLED CROP 8  MILLED CROP 8  CROP
TENNES	SEE	TEXAS, N	Northern I I I I I I I I I I I I I I I I I I I
Fayette County	27 1720CST 0 0 4 0 Thunderstorm Wind	Bell County	3 1400CST Short Narrow 0 0 0 0 Tornado (FO)
	Trees were downed in Somerville and Moscow; a house had some of its windows blown out in Somerville, and major damage occurred to	·.	A tornado was briefly observed in open country along Highway 36 near Temple.
	a house in Moscow as a tree fell on it. Power outages were wide- spread throughout the county.	Tarrant County	3 1425CST 0 0 ? ? TSTM Winds (60) 1500CST 0 0 5 0 TSTM Winds
Grand Junction, Hardeman County	27 1740CST 0 0 3 0 Thunderstorm Wind Several houses in Grand Junction sustained roof damage, and several		1500CST . 0 . 0 . 4 0 TSTM Wind (52)
Jonesborough, Washington County	trees and power lines were downed by powerful thunderstorm winds.  27 2040EST 0 0 5 0 Lightning  Lightning started a fire that destroyed a house on Route 1,		Winds to 60 knots were observed near Texas Christian University in Fort Worth at 14250ST. Strong winds ripped off a 2500 square-foot section of roof at a warehouse in the north part of Fort Worth at 1500CST, producing about \$100,000 damage. Winds to 52 knots destroyed a mobile home in Haltom City at 1500CST.
	causing \$60,000 in damage.	Upshur County	3 1500CST 0 0 ? ? TSTM Winds
Lenoir City, Loudon County	27 Night 0 0 3 0 Thumderstorm Wind		Strong winds uprooted a tree just southeast of Gilmer.
*	A tree, uprooted by strong thunderstorm winds, fell on and damaged two houses and a vehicle.	Gregg County Harrison County	3 1505CST 0 0 ? ? ISTM Winds 1505CST 0 0 ? ? TSTM Winds
		*	Strong winds downed trees near Judson in Gregg County and north of Longview Heights in Harrison County
		Hopkins County	3 1510CST 0 0 ? ? TSTM Winds
41 TEXAS, Nort			Strong winds uprooted trees and downed power lines just east and just north of Sulphur Springs.
Parker County	2 1425CST 0 0 ? ? Ha11 (0.75) 1425CST 0 0 ? ? TSTM Winds (50) 1510CST 0 0 4 ? TSTM Winds (56)	Denton County	3 1525CST 0 0 4 ? TSTM Winds Strong winds ripped the roof off a mobile home between Krum and
•	Dime size hail and winds to 50 knots were observed in the northwest part of the county at 1425CST. Winds to 56 knots destroyed a mobile home and several barns in the southeast part of the county at 1510CST.	Wood County	Bolivar.  3 1545CST 0 0 4 ? TSTM Winds 1605CST 0 0 ? ? TSTM Winds
Tarrant County	2 1520CST 0 0 ? ? TSTM Winds (52)		Strong winds downed trees and power lines and took the roof off a garage 5 miles north of Quitman at 1545CST. Strong winds also downed trees just south of Quitman at 1605CST.
	Winds to 52 knots were observed 5 miles east of Aledo at 1520CST.	Kaufman County	3 1715CST 0 · 0 ? ? Hail (0.75)
Hood County	2 1530CST 0 0 ? ? TSTM Winds (52)		Hail up to 3/4 inch in diameter fell at Forney.
	Winds to 52 knots were observed in the northwest part of Granbury at 1530CST.	Palo Pinto County	10 1450CST 0 0 ? ? TSTM Winds (52)
Palo Pinto County	2 1630CST . 0 : 0 ? - ? TSTM Winds (56)	Nacogdoches County	Winds to 52 knots were observed at Graford.  10 2030CST Short Narrow 0 1 5 ? Tornado (F1)
Taylor County	Winds to 56 knots were observed in Mineral Wells at 1630CST.  2 1645CST 0 0 3 0 TSTM Winds		A tornado destroyed 4 chicken houses and damaged 7 others four miles east of Chireno.
	Strong winds broke several windows in a motel in Abilene at 1645CST and also broke the windows of several nearby cars.	Dallas County	11 2004CST 0 0 ? ? TSTM Winds (50)
Harrison County	3 0225CST 0 0 ? ? Hail (1.00)		Winds gusted to 50 knots at Redbird Airport in Dallas.
	Hail up to one inch in diameter fell in an area south of Hallsville and east of Estes.	Brown County	17 1600CST Short Narrow 0 0 4 0 Tornado (F1)  A tornado destroyed a mobile home and damaged a gas station and
Panola County	3 0420CST	· ·	church along Highway 279 near Lake Brownwood.
	0425CST	Falls County	18 1800CST 0 0 4 0 TSTM Winds Strong winds destroyed a mobile home near Chilton.
	Trees and power lines were downed by strong winds between Woods and Gallaway at 0420CST. A funnel cloud was also observed at the same location at 0420CST. A funnel cloud was observed near River Hill at 0425CST. Hail up to the size of nickels fell at Beckville at 0545CST where strong winds also downed several trees.	41 TEXAS, Sout	hern
Shelby County	3 0438CST 0 0 ? ? TSTM Winds  Strong winds uprooted several trees near Paxton in the northern part of the county.	Wharton County	03
Smith County	3 0450CST 0 0 ? ? TSTM Winds		Three-quarter inch hail fell at Wharton, New Gulf and Boling. In Wharton, 4 men were slightly injured when lightning struck near
Gregg County	Strong winds downed power lines northeast of Tyler.  3 0535CST 0 0 ? ! Hail (1.00)		a tent structure that they were holding up. High winds from a thunderstorm downed trees across a road just north of Wharton, Power lines and billboards were also damaged. In the southwest part of the county near Louise, high winds from a thunderstorm downed trees and power lines. There was damage also to signs and
	Hail up to one inch in diameter fell at Easton in the extreme eastern part of the county.	Colorado County	O3 1850CST 0 0 0 0 Hail (0.75)
Rusk County	3 0538CST 0 0 ? ? Hail (1.00)  Hail up to one inch in diameter fell near Tatum in the northeast part of the county.		03 1850CST 0 1 0 0 Lightning  Hail the size of dimes fell at Bernado. Lightning struck a van and injured one occupant near Altair.
Stephens County	3 1320CST 0 0 ? ? TSTM Winds (52)	Harris County	04 1600CST 0 0 5 0 Wind
	Winds up to 52 knots were observed near Breckenridge.		High winds from a thunderstorm toppled trees and signs on the north, west and southwest sides of the city of Houston. One office trailer was destroyed. There were a few broken windows from fallen limbs and trees. A roof was blown off of one building.

PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (MILES) WIDTH OF PATH (TARDS) CROPS	PLACE	TTME - LOCAL STANDARD LENGTH OF PATH (TARDS) WILLED RILLED OO.OW KILLED OROPERTY CROPS CRO
TEXAS,	Southern	TEXAS, V	Vestern
Brazoria County	11 1340CST	Castro County	02 2030CST Short 40 D 0 5 ? Tornado (F1)
bracerta county	High winds from a thunderstorm ripped the roof off of a mobile	date of douney	An apparent tornado struck Dimmitt Municipal Airport around
	home in Manvel which is in the northeast part of the county,		sunset. The tornado overturned and heavily damaged three aircraft, destroyed a hangar, and threw a truck several yards.
Brazos County	18 1600-1715CST 0 0 5 0 Wind	Moore County	Damage was estimated at 75,000 dollars.  03 0015CST 0 0 5 0 Windstorm
	High winds from a thunderstorm ripped the roof off of an office and an apartment complex building,	Moore county	Thunderstorm wind inflicted widespread damage around the city of
Kinney County .	19 1800CST 0 0 5 0 Wind		Dumas. Wind completely destroyed a 40-foot travel trailer at the S&W Camper Sales Lot. Just west of the Dumas-Moore Airport, an
	High winds from a thunderstorm destroyed a barn and uprooted many trees in and around Bracketville. There was also some roof damage at Fort Clark.		80-foot mobile home was rolled into a garage, resulting in the total destuction of both. Two 8-foot stock tanks, located 6 miles west of Dumas, were blown from their tie-downs a distance of i mile, narrowly missing two homes.
Maverick County	19 Night 0 0 4 0 Wind	Gray County	03 0030CST 0 0 4 0 Lightning
	High winds from a thunderstorm broke out store windows from three businesses in Eagle Pass. There was one large sign that was blown over. Several trees were blown over, one of which fell on a car.		The home of County Judge Carl Kennedy sustained extensive fire and smoke damage after lightning struck and set the house afire on the north side of the city of Pampa.
Galveston County	21 1335CST 0 0 5 0 Wind	Hemphill County	03 0100CST 0 0 5 0 Lightning
	High winds from a thunderstorm broke out windows in a condominium complex on the east end of the island, U.S. Coast Guard reported one shrimp boat sank in rough water due to high winds.		Lightning struck a rural home at the Moore Ranch, 15 miles north- east of Mismi. The unoccupied house was completely destroyed by fire.
Cameron and Hidalgo Counties	21 1545CST 0 0 0 0 Hail (0.75) ? 0 1 0 0 Lightning	Castro County	08 1620CST 0 0 ? ? Windstorm, Hail (1.75)
	Hail the size of pennies fell at McAllen, Lightning struck near a fisherman on Delta Lake near Santa Rosa and the man was taken		Sheriff's office reported very strong gusty wind and heavy
Aransas, Nueces and	to a hospital and later released, 21 1600-1800CST 0 0 5 0 Wind		rainfall in Dimmitt, while golfball-sized hail pummeled the community of Hart in the southeast part of the county. A metal outbuilding was destroyed, windows were broken, and power lines
San Patricio Counties	High winds from a cluster of severe thunderstorms on the middle	Potter County	downed.   08 1751CST
	Texas Coast produced the following severe weather events. The hardest hit area was in and around Port Aransas where winds gusted to near hurricane force (74 MPH). Two boats capsized and several boats had to be towed to port due to the very rough water. The		Dime-sized hail was observed at the Amarillo Weather Service Office.
	extremely high downburst caused and unusual tide fluctuation on the Aransas Pass Channel at Port Aransas. A three foot variation in the	Sutton, Schleicher & Crockett Counties	11 Midnight- O O ? ? Heavy Rains 0700CST
·	tide was observed in less than an hour's time, Fences, signs and trees were downed in Port Aransas. There was also some roof damage. The U.S. Coast Cauard Station on the island measured the wind to 58 MPH. 7 miles offshore, a U.S. Corps of Engineers dredge reported a wind gust to 92 MPH. Rockport reported wind damage to fences and signs with a 65 MPH wind. Portiand winds were reported to be 56 MPH. Flour Bluff reported trees and fences down. Pain trees were	Crockett County	A cluster of nearly stationary thunderstorms dropped between 4 and 6 inches of rain over much of the normally dry counties. Water was over roadways in southern Crockett County.  11 Morning- 0 0 ? ? Flash Flooding
	toppled in parts of Corpus Christi.		Afternoon
Polk County	24 Afternoon 0 0 5 0 Wind  High winds from a thunderstorm downed trees and power lines on the northeast side of Livingston. Downed trees blocked at least two		Very heavy rainfall continued over Crockett County, with 6 inches of rain falling at the Henderson Ranch, southwest of Ozona.  Creeks and draws ran full, spilling water over farm and ranch lands and roads.
	streets. One business building lost its metal roof. One house was crushed beneath a large tree that was blown over. Winds were estimated by one observer to be near 70 MPR.	Reagan County	11 1439CST 0 0 0 Funnel
Atascosa County			A deputy sheriff reported a funnel cloud in the northern part of the county.
	Hail bear up a truck traveling on Interstate 37 near Pleasanton.	Randall County	13 1640CST 0 0 5 0 Windstorm
Val Verde County	Hail size was not reported,  28 0900CST 0 0 0 0 Flash Flooding		Thunderstorm wind destroyed 2 barns and 3 mobile homes, and damaged roofs along Pullman Road between 3.8 and 4.8 miles south of the Amarillo Weather Service Office.
	Heavy rains produced flash flooding in the northern part of the county, 3.85 inches of rain fell 10 miles northeast of Juno. Hwy.	Ochiltree County	13 1835CST 0 0 ? 0 Hail (2.75)
	163 was closed north of Comstock. Hwy, 1024 was closed at Pandale due to high water. Several other roads were closed in the area.		Baseball-sized hail fell about 15 miles southwest of Perryton, just north of the community of Wake.
Cameron County	29 1400CST 0 0 0 0 Flash Flooding	El Paso County	13 2115CST 0 0 0 Windstorm
	4.22 inches of rain fell in Harlingen and produced local street flooding.		Thunderstorm wind gusted to 60 mph at the Asarco Plant in the west part of the city of El Paso. No damage was noted.
		El Paso County	14 0040CST 0 0 4 0 Lightning
	•		Lightning struck and set fire to a building in the 200 block of South Conception in central El Paso.
41 TEXAS, West	ern	Eastern South Plains	14- Evening- 0 0 ? Reavy Rain, 15 Morning Flash Flooding
Ector County	02 1728CST 0 0 ? ? Windstorm		0 0 ? 0 Lightning A cluster of thunderstorms embedded in a large mesoscale
	Thunderstorm wind gusted to 60 mph in western Odessa near the Andrews highway. Damage was unknown.		convective complex brought rains of between 3 and 5 inches over most of the eastern South Plains. The rains fell largely in a period of less than 6 hours, resulting in flash flooding that
Castro County	02 1700- 0 0 ? ? Windstorm 1800CST 0 0 0 5 Hail (1.75)		closed many roads over the area and inflicted an unknown amount of crop damage due to flooded fields.
	Golfball-sized hail fell across the central part of the county in conjunction with the storm that produced the Dimmitt Airport tornado (below). The hail infilted nearly total damage to a 3-mile wide strip of cotton, milo, and watermelons. Some of the molons were cracked open, with dents the size of half dollars on them.		Lightning strikes resulted in numerous power outages and fires over the area, principally in Lubbock County. At least three homes were struck by lightning.

			AUGUST 1986
PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (MILES) MILLED CROPS ROBERTY CROPS	PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (YARDS) WIDTH OF PATH (YARDS) AND SALE OF STANDARD CROPS RILLED AND SALE OF SALE
TEXAS, V	Vestern	TEXAS, V	Western
Crosby County	14- 1800-	Tom Green and Coke Counties	27 0830- 0 0 ? Flash Flooding 1450CST
	Rainfall totalling between 3 and 4 inches sent flood waters over State Highway 40 in the eastern part of the county, closing the highway to all traffic for 12 hours.		Torrential rains from nearly stationary thunderstorms pounded the Water Valley - Grape Creek area. On top of what was between 3 and 6 inches of rain the previous day, flood water quickly made roads impassable in Coke County. Streets were flooded in the
Dickens County	14- 1800- 0 0 ? Flash Flooding 15 0500CST		community of Bronte.  Between 5 and 6 inches of rain fell between San Angelo and
·.	Rains of between 3 and 4 inches soaked most of the county. Rural highways between Dickens, Spur, and counties to the south and west were partially underwater. Rainfall at Spur totaled 4.43 inches.		Water Valley in northwest Tom Green County, pushing water into homes. In Carisbad, Post Oak Road at U.S. Highway 87 had between 3 and 5 feet of water over it.
Lubbock County	14- 1900- 0 0 ? ? Flash Flooding 15 0400CST 0 0 ? 0 Lightning		The flooding of the two-county area continued well into the afternoon, and by 1400 CST the Highway Department closed FM Road 2288 at the North Concho River as water poured over the bridge.
	Rainfall totaling up to 3 inches over the southern part of the city of Lubbock fell within a space of 30 minutes (between 2200 and 2300 CST), causing widespread street flooding. Quaker Street, just north of Loop 289, was closed due to high water from a flooded playa lake for several days thereafter.	Concho Valley and Permian Basin	28 Early Morning- 0 0 ? ? Flash Flooding Early Evening  Very heavy rains associated with a vigorous upper level disturbance resulted in flash, flooding over the Concho Valley
	Lightning knocked out power over portions of the city intermittently for several hours during the event.		and parts of the Permian Basin. Rainfall totaled over 7 inches in southern Coke, northern Tom Green, southern Crockett, and Crane Counties.
Garza County	14- 1900- 0 0 ? ? Flash Flooding	Coke and Tom Green Counties	28 0627- 0 0 5 . ? Flash Flooding 1130CST
	The large complex of rain and thunderstorms spread into Garza County, bringing a protracted seige of heavy rainfall. Rains of between 3 and 4 inches sent water over U.S. Highway 84, blocking early morning traffic and flooding cotton crops. Much of the cotton was damaged beyond survival.		A cluster of nearly stationary thunderstorms produced flooding in and near Robert Lee. The Department of Public Safety reported PM Road 2034 morth of Water Valley closed due to high water. By 1100 CST, between 7 and 8 inches of rain had, failen between Water Valley and the community of Grape Creek.
Midland County	15 1834- 0 0 0 0 Funnels 2000CST 0 0 7 ? Windstorm Short 30 0 0 0 0 Tornado (FO) 0 0 ? ? Flash Flooding		The rainfall pushed Grape Creek and other nearby streams out of their banks. Street flooding crippled the community of Grape Creek, while PM Road 2288 northwest of San Angelo was closed at the Concho River. At least 5 homes were flooded in Grape Creek.
	A slow-moving thunderstorm pushed across the county, reducing visibility to as little as 50 feet in heavy rain in the city of Midland. The heavy rain caused flooding that closed Interstate 20 south of the city of Midland.	Crane County	28 0844- 0 0 ? ? Flash Flooding 1300CST
	At least one funnel was reported by four sources (between 1903 and 1920 CST) across the west and northwest part of the county. The Department of Public Safety reported a tornado 12 miles east-northeast of Midland Airport. There was no apparent damage.		The City of Crame Civil Defense Director reported torrential rain that left 2 feet of water in the city during mid-morning, By 1240 CST, more than 7 inches of rain had poured on the town. The Crame County Sheriff's Office reported that city streets were completely under water and some houses were flooded.
	A downburst destroyed a barn and spread its debris across County Road 120. Wind was estimated to have been 95 mph.	Crockett County	28 1130CST 0 0 ? ? Flash Flooding  Very heavy rain closed State Highwy 163, RM Road 1024, and
Winkler County	25 1929CST 0 0 ? ? Windstorm 0 0 ? ? Flash Flooding 0 0 0 0 Funnels	Howard County	Taylor Box Road in the southern part of the county. By 1515 CST, the Bob Childress Ranch in the southern part of the county had collected 7.50 inches of rain.  30 1945CST 1 ? 6 ? Flesh Flooding
	High wind, very heavy rain, and numerous funnels accompanied a thunderstorm in the city of Kermit. The rain caused widespread flooding in the city.	nound councy	Rains from "train-echo" thunderstorms moving across the county totaled as much as 4.80 inches at Vincent and 2.50 inches at
Winkler County	25 1930~ 0 0 4 ? Windstorm 1949CST 0 0 ? 0 Flash Flooding		Lomax. The rainwater flooded streets and filled streams to bankfull. In Big Spring, Cosden Lake earth dam overflowed and developed a 9-foot crack that caused flooding in parts of Big Spring, Around 2215 CST, a pickup with 3 passengers (father,
	The same storm complex that struck Kermit concurrently brought high wind and heavy rainfall to the city of Wink. A storage building was overturned, porches damaged, and one trailer unroofed by wind at 1949 CST. Wind was estimated to have been 65 to 75 mph. Several homes were flooded because of the heavy rains.		mother, and son) was swept off the road at the 2000 block of Birdwell Lane, downstream from the dam. Father and son held on to a tree branch, but the mother (Mary Gutierrez, age 44) lost hold of the branch and drowned. F44V
Winkler County	25 2113CST 0 0 ? 0 Windstorm 0 0 ? Flooding	Hartley County	30 2133CST 0 0 0 0 Flash Flooding Thunderstorms moving slowly southward across the county resulted in flooded roadways.
7 .	A second severe thunderstorm poured heavy rain over the city of Wink, and high wind inflicted additional unspecified damage within the city. Over 5 inches of rain fell during the evening.	Bailey and Lamb Counties	31 0322CST 0 0 ? ? Flash Flooding
Scurry and Nolan Counties	26 0930- 0 0 ? ? Flash Flooding 1045CST		Rains of between 2 and 3 inches caused widespread flooding of fields. The fields overflowed across rural roadways west of Earth in Lamb County and caused their closure. Street flooding
}	Strong thunderstorms moved very slowly across the area, producing 4.50 inches of rain at HermLeigh in southeast Scurry County. Water rapidly collected in fields and low water crossings. By 1045 CSI, the Roscoe Police closed U.S. Highway 84, 9 miles northwest of the city in extreme northwest Nolan County, due to water over the roadway. The highway remained closed through mid-afternoon.	Hale County	was reported in the city of Muleshoe in Bailey County.  31 0345CST 0 0 0 0 Flash Flooding  Rains of between 2 and 3 inches caused widespread street flooding in the city of Plainview, according to police department officials.
Brewster and Culberson Counties	27 0200- 0 0 ? ? Flash Flooding 0510CST	Midland County	31 1940- 0 0 5 0 Windstorm 2018CST
	Early morning thunderstorms dumped 3.60 inches of rain at Guadalupe Pass and 1.49 inches in just 40 minutes at Radio Station KVLF in Alpine. The rain flooded streets in Alpine.		Thunderstorm wind downed power lines and spun an automobile around in the western part of the county. A power pole was broken by wind on FM Road 160 at Holiday Hill Road in the northwest part of the county.
		Ector County	31 2110CST 0 0 0 Hail (0.75) Dime-sized hail was reported by a Skywarn Spotter 10 miles
			south of Goldsmith.

			AUGUST 1986
, PLACE	TIME - LOCAL STANDARD LENGTH OF PATH ('MILES) WIDTH OF PATH ('MILES) WIDTH OF PATH ('ARDS) WIDTH OF PATH ('ARDS) CROPS INJURED CROPS	PLACE	TIME - LOCAL STANDARD LENGTH OF PATH (TARDS) WIDTH OF PATH (TARDS) WIDTH OF PATH (TARDS) WIDTH OF PATH (TARDS) CROPS CRO
42 UTAH	is	43 VERMONT	
Duchesne County	08- 1600MST 0 0 1 0 Hail (1.00) 08 1615MST  A thunderstorm covered the ground with 1 inch diameter hail in Fruitland. The spotter who reported the hail received no rain during the storm.  12 unk 0 0 0 2 0 Lightning	Addison County Addison County Addison County Windsor County Rutland County Rutland County Rutland County Chittenden County	06
	Lightning struck a roof-mounted evaporative cooler in Sandy. No one was injured and damage was minimal.		A tornado touched down in the town of Westford. It was observed by a local citizen.
Davis, Morgan, Salt Lake, Tooele, and	20- 1915MST 0 0 5 0 Flash Flooding 20 2200MST		
Utah Counties Utah County	20 unk 0 0 4 0 Thunderstorm Winds	Chittenden County	08 1540EST 0 0 0 0 Funnel Cloud Six persons reported sighting a funnel cloud between the towns
	Heavy thundershowers produced 2.10 inches of rain between 6 and 3 p.m. MUT in Tooele on this Wednesday evening, and over 1.50 inches in most places along the Wasstch Front. Widespread urban flooding occurred, but no injuries and only moderate damage was reported. Shortly after 8 p.m., the Utah Highway Patrol reported.		of Essex and Jericho. Sightings were made between 1540-1550 EST. All reported a rotating funnel elongating and dropping out of the clouds to within 100 feet of the ground.
	8 to 10 inches of water in some spots over Interstate 84 through Morgan County. The city of Morgan received a storm total of 2.20	Calendonia County	08 Unk 0 0 6 0 Flash Flood
	inches, which was the most rainfall reported from the storm. By 9 p.m., reports from Toole indicated some basement flooding, but only minor damage. In Salt Lake and Davis counties however, flooding was more extensive and caused more damage. Street flooding in the east sections of the Salt Lake City downtown area stranded "a lot of cars" in intersections where 1 to 2 feet of water had accumulated. The road up City Creek Canyon was		Heavy rain resulted in streams around Byegate overflowing their banks. The heavy rain also collapsed s beaver dam which added to local flood problems. A number of roads had large gaping holes in them, many of which had just been repaired from last months heavy rain.
	undermined by the runoff and closed through the next day. Four inches of water collected in the University of Utah's Chemistry	Chittenden County Chittenden County	23 Unk 0 0 3 0 High Wind 23 0232EST 0 0 4 0 Wind Gust
	building as rain came through ventilation shefts. Ten to fifteen other buildings on the campus elso had water. In Davis County, 20 to 25 homes in Farmington had flooded basements and mud and debris flows blocked several smaller roads. In Utah County, high winds from the storms blew trees into power lines in several areas and knocked the power out to 1600 homes for about 90 minutes. Also in Utah County, minor flooding, mudslides and rock slides occurred in American Fork, Provo, and Spanish Fork		High winds blew down power lines, broke boats loose from their moorings, and knocked over trees.
	canyons.	44 VIRGINIA	
Emery County Emery County	24 1300MST 0 0 2 0 Flash Flood 24 1830MST 0 0 2 0 Flash Flood	Warren County and	02 1330EST 1 50 0 0 ? ? Tornado (F1)
	Plash flooding occurred on two occasions on this Sunday afternoon and evening. The first occurred at the Cleveland Lloyd Dinosaur Quarry area. Persons in the area reported that up to two feet of water quickly filled ravines and that water was up to the truck doors in some intersections. The second occurred along Utah	Clark County	A tornado crossed Bowling Green Golf Course, destroying a barn. The roof of the barn was carried about 100 feet. Another barn and about 100 trees were destroyed in Clark County.
	Highway 10 between Moore and Interstate 70. Water 3 to 4 feet deep accumulated along that roadway. Little or no damage was reported.	Madison County and Campbell County Goochland County	02 1430EST
Iron County	29 1505MST 0 0 3 0 Flash Flood Heavy rainfall during the daytime hours produced a flash flood which covered parts of Utah Righway 56 and Interstate 15 south of	document sound,	Winds A line of thunderstorms moved east across western Virginia. A roof was torn off a building 8 miles east of Lynchburg. Several trees were downed.
	Coder City with 5 to 6 feet of water. Reports were received from the Utah Highway Patrol and the Sheriff's Office in Codar City. Spotters in the area estimated that the heaviest rain fell	Pulaski County	06 1400EST 0 1 0 0 Lightning
Garfield County Grand County	between Cedur City and Kannaraville. One spotter in the area measured 1 inch of rain in 30 minutes.  30 1345MST 0 0 1 0 Hail (1.75)		An Si year old woman was struck by lightning while cooking at an iron woodstore. She was blown across the room and struck a wall. She recovered fully.
	A thunderstorm moving through eastern Utah produced large hail in	Shenandoah County	06 1400EST 0 0 4 ? Thunderstorm Winds
	at least two different places. The first report of hail came from a spotter in Boulder. That storm lasted for about 10 minutes and covered the ground with hail up to 1 3/4 inches in		Half the roof was blown off a barn south of Strasburg during a thunderstorm.
	diameter. Shortly afterward, another report of 3/4 inch to 1 inch hail was received from the Utah Highway Patrol along Interstate	Nottaway County	06 1700EST 0.5 30 0 0 4 7 Tornado (F1)
Wayne County	70, 20 miles east of Green River at Spotted Wolf Summit. The hail piled up 6 inches deep on the ground.  31 1430MST N/A N/A 0 0 1 0 Tornado (FO)		A tornado desclished a 50 by 80 foot screen at a drive-in theater and did considerable damage to a private residence. Several dozen trees were uprooted.
	A tornado touched down for about 10 minutes in eastern Wayne County just west of the "Island in the Sky" ranger station, A	Prince William County	06 1800EST
Sevier County	National Park Service Ranger and several visitors watched the tornado from a distance. No damage was suffered because the tornsdo tracked across undeveloped desert land. Path length and width are also unavailable.  31 1430MST 0 0 1 0 Hail (0.75)		In the worst flooding since Hurricane Agnes in 1972, \$2.50 inches of rain fell in less than 90 minutes in western Prince William County. Several homes were flooded in Manassas, with waters as high as 10 feet inside one residence. Saveral cars and trucks were overturned by waves of water.
	Heil that was estimated to be at least 3/4 of an inch in diameter	Botetourt County	07 1310EST 0 0 ? ? Hail
	destroyed the roof of a Volkswagen convertible in Sigurd.		One inch hail fell mear Eagle Rock and 1 1/4 inch hail fell west of Buchanan.
		Lee County	07 Afternoon 0 1 0 0 Lightning
			A 23 year old woman was struck by lightning while standing next to a tree in Ewing. She was knocked unconscious and is expected to remain severely brain damaged.

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	ARDARD ANDARD GOTHOLES) ANDARD GOTHOLES								¥.	PATH	I	NO. PERS	OF ONS	ESTIMA DAMA							
PLACE	TIME - LY STANDARD LENGTH OF (WILES) WIDTH OF P (TAROS) CROPS CROP		CHARACTER OF STORM	PLACE	   <u> </u>	TIME - LOCAL STANDARD	LENGTH OF PA	WIDTH OF PATH (YARDS)	מררבם	INJURED	PROPERTY	CROPS	CHARACTER DF STORM								
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VIRGINI	A							47 WISCONSIN													
ViZ001-002 Bastern Shore and Coastal Area	core and Hurricane Charley moved north-northeast, parallel to the coast, passing over extreme southeastern Virginia and just east of Cape Charles. Vinds gusted to 82 MPH at Cape Henry, 81 MPH at the Norfolk Coal Pier, and 63 MPH at the Norfolk							Glidden, Ashland Co.	Hai fro	1225CST I up to g om a sever ted, wind itsh on ve	e thund ows wer	erstorn e broke	near	Glidd	len. Ga	grou	were				
	extreme southeastern Virginia and just east of Cape Charles. Winds gusted to 82 MPH at Cape Henry, 81 MPH at the Norfolk						r ut	Tomahawk, Lincoln Co.	Ol 1330CST O O 3 3 Thunderstorm Winds Gusty thunderstorm winds snapped several trees and caused minor house damage 1W of Tomahawk.												
							High Some · ves in	Marion, Waupaca Co. Bay of Green Bay,	Int tea her car		derstor power 1 k,killi	ines, s	ome of Anothe	Mario F which er dow	on blew ch wras wned tr	tree ped a ree cr	round a ushed a				
Gloucester County	one million	dollars	0	3	0	0	Lightning	Door Co.	O1 A s	01 1730CST 0 0 0 0 Funnel Cloud 1735CST 0 0 4 ? Thunderstorm Winds A severe thunderstorm created a funnel cloud over the Bay of Green Bay near Fish Creek. Violent winds from the thunderstorm caused considerable damage to a barn											
	Three peopl standing un hospitaliza after treat	der a tr tion, wh	ee. Two	peop	le r	equire	ed	Lake Michigan	for	thunders thouse 18 and 4 mile	of Fis s from	ih Creel	c. Sect			e sidi					
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45 WASHINGTO	N					•		Milwaukee Co. Waukesha Co.	The	1100- 1700CST e Milwauke oudburst b orm durati	reaking	all p	rev1ous	s rain	nfall ı	th a record	Flash Flood s for a hell				
Yelm (Thurston Co.)  Mabton (Yakima Co.)  Othello (Adams Co.)	that struck t system and so Necessary rep 29 0530- 0605PST An area of ea central valle 16 year old g transformer a	he Yelm So me compute airs kept rly mornin ys with vi irl was in nd was car	chool Dis r equipm school f 0 ng thunde vid ligh djured sl ried alo	erstorm erstorm itning. lightly	build lotal ening ? us mov In t	ding, dadamage g for an 0 ved acrothe town in lightnines in	Thunderstorm, Lightning on caused lightning on caused lightning amaging the phone was near \$15,000 nother 7 days.  Thunderstorm, Lightning oss the south-n of Mabton, a ning hit a to the house cked her out.		In no be ra in was older as older Ar ar pl	ternationa on and lpm tween 1pm infall swa ches fell' uwatosa. 2 uthwest a well as r d boy was ver. An 8 r flooded ound \$5.9 ea. Mitche ace, was	il Airpa and 2pr th ran throughth ran throughth or ortheas swept if year of basement million all Airpout out	ort, 3.4 ith an in cdt. In cdt	06 incl addition A 5 to y from n Milwa bounts wo death ! abled w r suffe mage on here \$ vice w	hes of onal 2 aukee aukee mos of ounty. by the woman ering ccurred mil'hen 9	f rain 2.18 in us inch Creek , West measur Milwa . An e e Kinn was fo a hea ed thr lion in	fell nches h (where Milwa ed ove ukee C leven ickinn ound d rt att oughou n dama on gal	between falling 7.25 ukee to r ounty, year ic ead in ack. t the ge took lons of				
46 WEST VIRGI	and grass 20 and bark was	indow of a the bolt s feet into	home whatruck 30 the air.	ere a feet leavi	womar from ng a	n was si the hou trench			bu co 4 Ac fl wi th co Re ha th St	ter enteri flding can mputer, ar foot hole ross the f ooded by it the the hat e south s llapsed f habilitat d to evace e ground adium was x seats. I ooded, st ople.	taining of the country of the countr	g elect r equip way 7, nties, 1 nwater it area Milwauk on wall pital r O patie f the b d up to s stree	rical, nent. the pr 0,000 l and san in the ee. The s to c eceive nts wh uildin the f ts and	comm A ligh A ligh A light Bay e Bay e dam onten d \$1 m en flo g. Mi ourth unde	unicat htning east-vents we y sewe View age rai t dama millio ood wa lwauke row o	ion, bolt west re ere re re back portic nged i ge. De n dam ters e e Cour f the s were	blew a unway. ported ups in of from Paul ge and intered ity lower				
	High winds assunder construct the building t	ction to c	ollapse.	Four	nders work	torms ers wer	caused a church e injured and	Salem Township, Pierce Co.	Lt	1145CS ghtning s ur heifer	truck a					steer					
Cabell County	23 2015EST Lightning str Three firefight totally destra	nters were	injured	while	3 derst figh	orm.nea	Lightning or Salt Rock. ne blaze which	Wittenburg, Shawano Co.	07 D1		T ail fro		0	0	0	?	Hail (0.75)				
Kanawha County	central West Y	/irginia b /heel Rega	lew down	a 20	foot	passin scaffol	Wind  g through east- d tower set up when hit by the	Minong, Washburn Co.	09 A 14	funnel cl	oud was	spotte	-0 d 2W o	O of Min O	0 nong, 3	0	Funnel Cloud				
	. "							Green Co.	ca	ghtning fi lves and a a house m	ilso car	ısed ex				111ed	6 beef				
					•			Knapp, Dunn Co.		1823CS severe the ar Knapp.		orm dum	0 ped ha	0 11 up	? to go		Hail (1.75) size				
								Merrill, Lincoln Co.	Ha	1940CS il up to 3 understorn	3/4 incl			0 fe11	? from		Hail (0.75) re				

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PLACE	DATE TIME - LOCAL STANDARD	LENGTH OF F (MILES)	(YARDS)	INJURED	PROPERTY	CROPS	CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF P	WIDTH OF PATH (YARDS)	KILLED	INJURED	PROPERTY	CROPS	CHARACTER OF STORM
WISCON	SIN	<del>1</del>			•	<u> </u>		WYOM	ING	ı.		•	<u> </u>	<b></b>			· · · · · · · · · · · · · · · · · · ·
Houlton, St. Croix Co.	16 1949CST An intense th diameter in h		0 m produ	0 ced ha	? 11 3/-	? 4 inch	Ha11 (0.75)	Campbell County, Reno Junction	.23 At 1:	1830MS 830MST no	ear Rer	o Juncti	0 on, 11	0 ghtn1	4 ng stru		Lightning pempty oil stor
Mondovi, Buffalo Co.	17 0230CST  Very strong to couple of whith Mondovi. A damaged.	ch crushe	d a car	and da	amage	20 tre	or home	Park County: Cody 4 E Cody Cody	25 25	0354MS 0430MS Afternoo	[ [ ]	25	0 0	0	? 4 4	0	Thunderstorm Wind (69) Tornado (F1) Lightning
Beloit, Rock Co.	26 0600- 0620CST Strong thunde and power lin	es in Bel			? own s		Thunderstorm Winds trees		with Cody upro	a thunde saw a to oted and	erstorn ornado cars c	. At 04 destroy amaged b	30MST a trai y flyi	, 2 e 1er ing d	yewitne house a ebris.	sses! ind a s Durir	e Cody airport i miles east of shed. Trees wer ng the afternoor ear Cody.
Florence Co.	SPRING & SUMM A drought whi spring, compa widespread or crops were ha others were s	ich saw on ired with op failur iy and cor	a norma e acros n. One	l of 1 s the farmer	1.70 count deci	inches, y. Hard ded to	caused est hit	Washakie County, Worland	25	1418MS1 18MST, ti	ſ		0	0	?	0	Thunderstorm Wind (67) ed at the Worlan
48 WYOMING	,				٠			<sup>49</sup> ALASKA, N	lorth	ern		— NO REI	PORT R	ECË 11	VED		
Laramie County: 25 NE Cheyenne 15 E Cheyenne	01 1850MST 01 1925MST		0	0	0	?	Hail (0.75) Hail (1.00)	49 ALASKA, So	outhe	ern —		— NO REI	PORT R	ECEI	VED		•
Albany County,		Cheyenne.	At 192				850MST,25 miles ell at Hillsdale,	49 ALASKA, So	outhe	easter	ı —	— NONE	REPORT	ED			
15 ENE Laramie	02 1658MST Golf ball size damaged a depu	hail 15 m ty sherifi	0 miles ea f's car.	0 ast-nor	4 theas		Hail (1.75) ramie heavily	50 HAWAII									
Laramie County: 25 N Cheyenne 20 W Cheyenne Harriman	of Cheyenne. piled up to a	At 1740MS1 depth of a	f,3/4 in couple	nch hai e of in	1 20 ches.	inch ha miles w At Ha	Hail (1.00) Hail (0.75) Hail (0.75) Hail (1.75) Hail 25 miles north Hest of Cheyenne Horiman, 25 miles Hell at 1800MST.	HIZO01 Kauai	Heav	1730HST y rains, ding alo fly over	local	north sh	0 cess o nore o	0 f 10 f Kau	inches	, caus	Flash Flood ed some flash elei River also
Laramie County, 3 SSE Cheyenne	miles south an	o 1417MST, d southeas	st of Ch	neyenne	. Mi	in diam	Hail (1.00) Hater fell 2 to 4 Hail and low-lying Hato 3/4 to 1-1/4	51 PUERTO RIO	31	1345AS man was		by a bo	l Lt of	0 light	0 tning s	0 t the 1	Lightning Monte del Estad
Platte County: Glendo Guernsey	inches of rain 03 1610MST 03 1712MST		0	0	?	0	Hail (1.00) Hail (1.75)		camp	ing area	on H1	ghway 120	),				
Niobrara County, Lusk	At 1610MST, hai 1712MST, golf b 03 1840MST Thunderstorm w Lusk.	all size ł	nail was O	repor O	ted i	n Guerr		52 VIRGIN IS	LANI	os <sub>.</sub> —		— NONE I					
Laramie County: 7 S Cheyenne 10 W Cheyenne	14 1400MST 14 1506MST 3/4 inch hail w At 1506MST,goli						Hail (0.75) Hail (1.75) nne at 1400MST. of Cheyenne.										
Carbon County, Saratoga	i7 Afternoon	ernoon, a 1	0 ightnin	0 ig-caus	0 ed fi	4	Lightning ed \$6,000 worth					•					
Fremont County, Riverton	23 1450MST At 1450MST, thu Riverton airpo		0 wind gu	0 ists to	? 72 m		Thunderstorm Wind (72) logged at the										

#### STORM SUMMARY

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TYPE	ALABAMA	ARIZONA	ARKANSAS	CALIFORNÍA	COLORADO	CONNECTICUT	DELAWARE	FLORIDA	GEORGIA	Ірано	SIONITI	INDIANA	IOWA	KANSAS	KENTUCKY	LOUISIANA	MAINE	MARYLAND & DC	MASSACHUSETTS	MICHIGAN	MINNESOTA	MISSISSIPPI	MISSOURI	MONTANA	NEBRASKA	NEVADA	NEW HAMPSHIRE
TORNADOES					•				_			E 57				E 57.											
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SEE REFERENCE NOTES FOR STORM DAMAGE CATEGORIES

#### STORM SUMMARY

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ТҮРЕ	NEW JERSEY	NEW MEXICO	NEW YORK	NORTH CAROLINA	NORTH DAKOTA	ОНЮ	ОК ГАНОМА	OREGON	PENNSYLVANIA	RHODE ISLAND	SOUTH CAROLINA	SOUTH DAKOTA	TENNESSEE	TEXAS	ОТАН	VERMONT	VIRGINIA	WASHINGTON	WEST VIRGINIA	WISCONSIN	WYOMING	ALASKA	HAWAII	PACIFIC	PUERTO RICO	VIRGIN ISLANDS	NATIONAL DEATHS & INJURY TOTALS
TORNADOES					-		-						22				:					#			-		=
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#### REFERENCE NOTES

- † Storm damage categories are from
  - 1 to 9 as follows:
  - 1 Less than \$50
  - 2 \$50 to \$500
  - 3 \$500 to \$5,000
  - 4 \$5,000 to \$50,000
  - 5 \$50,000 to \$500,000
  - 6 \$500,000 to \$5 Million
  - 7 \$5 Million to \$50 Million
  - 8 \$50 Million to \$500 Million
  - 9 \$500 Million to \$5 Billion

- \* Miles instead of yards
- \*\* Yards instead of miles
- @ Includes heavy sleet storm
- # Freezing drizzle and freezing rain, commonly known as glaze
- # Not received or incomplete
- O/c Under Estimated Damage,
  - Property/Crops, indicates crop damage amount is included
    - in the figure given

#### <u>Definition of Fujita Tornado Scale (F scale)</u>

- (FO) Gale tornado (40-72 mph): Light damage Some damage to chimneys; break branches off trees; push over shallow-rooted trees; damage sign boards.
- (F1) Moderate tornado (73-112 mph): Moderate damage The lower limit (73 mph) is the beginning of hurricane wind speed; peel surface off roofs; mobile homes pushed off foundations or overturned; moving autos pushed off the roads.
- (F2) Significant tornado (113-157 mph): Considerable damage Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light-object missiles generated.
- (F3) Severe tornado (158-206 mph): Severe damage Roofs and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted; heavy cars lifted off ground and thrown
- (F4) Devastating tornado (207-260 mph): Devastating damage Well-constructed houses leveled; structure with weak foundation blown off some distance; cars thrown and large missiles generated.
- (F5) Incredible tornado (261-318 mph): Incredible damage
  Strong frame houses lifted off foundations and carried considerable distance to disintegrate; automobile-sized missiles fly through the air in excess of 100 m; trees debarked; incredible phenomena will occur.
- (F6-F12) (319 mph to Mach 1, the speed of sound): The maximum wind speeds of tornadoes are not expected to reach the F6 wind speeds.

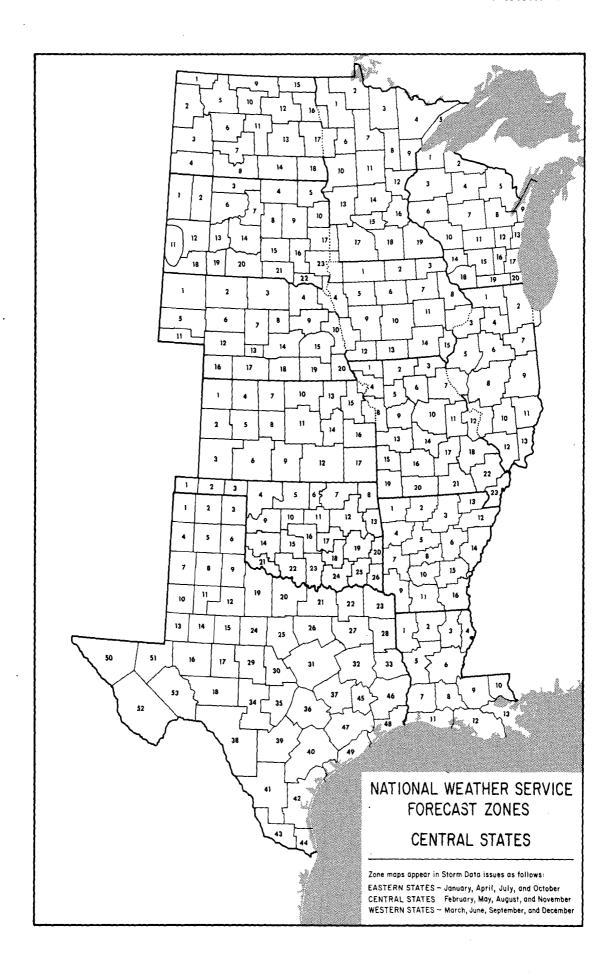
(F0+F1) Weak Tornado

(F2+F3) Strong Tornado

(F4+F5) Violent Tornado

From J. Atmos. Sci., August 1981, p. 1517-1519







# Association of State Floodplain Managers 11th Annual Conference

Seattle, Washington June 9 - 12, 1987

# FLOODPLAINS '87 Realistic Approaches to Better Management

CONFERENCE HOST: Washington Department of Ecology

The Association of State Floodplain Managers (ASFPM) is a national organization and its goal is the reduction of flood hazards through sound floodplain management. Its members include representatives of local, state and federal government as well as those of the private and non-profit communities. The Association sponsors an annual conference on the state-of-the-art in flood hazard reduction. Conference topics always span a broad spectrum of issues of interest to those involved in floodplain management.

This year's conference theme focuses on realistic approaches to solving problems associated with managing floodplains:

- \* How can practitioners best manage floodplains with minimal data?
- How can state and local governments be instilled with a greater sense of responsibility for flood-plain management?
- \* How do we balance the need to preserve vanishing natural values of floodplains with the pressures to develop them into fully urbanized areas?
- \* How do we reduce flood damages when current methodologies don't adequately address local and regional flood hazards such as areas below unsafe dams, alluvial fans, meandering atreams, rising lakes, mud slides, wetlands, ice jams, and so on? How can these areas be better managed?
- \* How do we best mitigate existing flood damages?
- \* What is the best way to tie floodplain management goals into other river or coastal management goals such as recreation, environmental protection, and economic development?
- \* As stormwater flooding and substandard drainage increasingly become a more significant hazard in the country, what floodplain management tools can we apply to solve these problems?
- \* How can we make the floodplain resident and property owner more aware of flood hazards? Where do we find the resources to deal with these problems?

#### **About the Conference**

The technical conference will be held Wednesday, Thursday and Friday and will include a field trip in the Seattle area. The conference will feature one track of concurrent sessions dealing specifically with the western states' flood damage reduction problems. The ASFPM will conduct its committee and general membership meetings on Tuesday. All members and prospective members are invited to participate. A Puget Sound boat cruise including dinner is scheduled one evening. Optional field trips and spouse activities will be available.

#### **Registration Rates**

Registration prior to May 1, 1987 will be \$150 for members, \$165 for non-members, and \$65 for students and local government officials from Washington state.

#### Exhibit Space

Exhibit space will be made available for a fee to individuals or organizations who wish to display a product or service to attendees, information on exhibit space can be acquired from Mark Riebau, Exhibits Coordinator at the address below.

#### **About Seattle**

Located on Puget Sound, Washington's treasured inland arm of the Pacific, Seattle has a lively port and is the Northwest's cultural and commercial center. Seattle's spring weather is mild and typical of the regional maritime climate. Visitors to Seattle are only a couple hours drive from any of Washington's three spectacular national parks: Mt. Rainier, Olympic Mountains and the North Cascades.

The conference will be held at the Stouffer Madison Hotel in downtown Seattle. Conference room rates are \$62 single, and \$74 double. The compact downtown area features an excellent aquarium and waterfront, the fascinating Pike Place Market, old Pioneer Square, and a number of superb restaurants. As well as providing exercise for pedestrians, Seattle's downtown hills offer fine views of the city, the Sound, and the mountains.

CONFERENCE DIRECTOR

Ed Hammersmith Dept. of Ecology PV Mail Stop 11 Olympia, WA 98504 (206) 459-6793 PROGRAM CHAIR

Mary Fran Myers Div. of Water Resources 310 S. Michigan Ave. Rm 1606 Chicago, IL 60604 (312) 793-3865 **EXHIBITS COORDINATOR** 

Mark Riebau Wisconsin DNR P.O. Box 7921 Madison, WI 53707 (608) 266-2709



# Association of State Floodplain Managers 11th Annual Conference Seattle, Washington June 9 - 12, 1987

#### FLOODPLAINS'87: Realistic Approaches to Better Management

DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE
NATIONAL CLIMATIC DATA CENTER
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